

Appendix 1

Descriptive Statistics

Table 1: Missing values of cortisol samples and sampling times

	complete samples N (%)	missing samples N (%)
Study 1		
Cortisol samples	1158 (93.7)	78 (6.3)
Sampling times	1182 (95.6)	54 (4.4)
Cortisol samples and/or sampling times	1125 (91.0)	111 (9.0)
Study 2		
Cortisol samples	3954 (97.8)	90 (2.2)
Sampling times	3881 (96.0)	163 (4.0)
Cortisol samples and/or sampling times	3809 (94.2)	235 (5.8)

Table 2: Missing values of cortisol samples and sampling times by sampling day

	Day 1	Day 2		
Study 1				P ⁺
Cortisol samples	44 (7.1)	34 (5.5)		n.s.
Sampling times	22 (3.6)	32 (5.2)		n.s.
Cortisol samples and/or sampling times	55 (8.9)	56 (9.1)		n.s.
	Day 1	Day 2	Day 3	P ⁺
Study 2				
Cortisol samples	38 (2.8)	32 (2.4)	20 (1.5)	n.s.
Sampling times	48 (3.6)	49 (3.6)	66 (4.9)	n.s.
Cortisol samples and/or sampling times	82 (6.1)	74 (5.5)	79 (5.8)	n.s.

Missings in N (%); ⁺Chi-square, * p<0.05; ** p<0.01

Table 3: Missing values of cortisol samples and sampling times by sampling times

	t(+0)	t(+30)	t(08:00)	t(11:00)	t(15:00)	t(20:00)	P
Study 1							
Cortisol samples	7 (3.4)	7 (3.4)	18 (8.7)	17 (8.2)	15 (7.3)	14 (6.8)	
Sampling times	4 (1.9)	7 (3.4)	8 (3.9)	10 (4.8)	8 (3.9)	17 (8.2)	*
Cortisol samples and/or sampling times	10 (4.8)	12 (5.8)	22 (10.7)	20 (9.7)	20 (9.7)	27 (13.1)	*
	t(+0)	t(+30)	--	--	t(16:00)	t(20:00)	P
Study 2							
Cortisol samples	24 (2.4)	22 (2.2)	--	--	15 (1.5)	29 (2.9)	
Sampling times	26 (2.6)	40 (4.0)	--	--	38 (3.8)	59 (5.8)	**
Cortisol samples and/or sampling times	50 (4.9)	59 (5.8)	--	--	48 (4.7)	78 (7.7)	*

Missings in N (%); Chi-square, * p<0.05; ** p<0.01

Table 4: Missing values of cortisol samples and sampling times by gender

	Men	Women	P⁺
Study 1			
Cortisol samples	12 (4.3)	66 (6.9)	
Sampling times	27 (9.8)	27 (2.8)	**
Cortisol samples and/or sampling times	34 (12.3)	77 (8.0)	*
	Men	Women	P⁺
Study 2			
Cortisol samples	34 (2.6)	56 (2.0)	
Sampling times	55 (4.2)	108 (3.9)	
Cortisol samples and/or sampling times	83 (6.4)	152 (5.5)	

Missings in N (%); *Chi-square, * p<0.05; ** p<0.01

Table 5: Missing values of cortisol samples and sampling times by occupational group

	Nurses	Teachers	Hotel staff	Social service		P⁺
Study 1						
Cortisol samples	45 (7.6)	7 (2.6)	16 (14.8)	10 (3.6)		**
Sampling times	24 (4.1)	17 (6.4)	8 (7.4)	5 (1.8)		*
Cortisol samples and/or sampling times	54 (9.2)	20 (7.6)	24 (22.2)	13 (4.7)		**
	Nurses	Teachers	Hotel staff	Social service	Mixed group	P⁺
Study 2						
Cortisol samples	30 (2.9)	23 (1.7)	0 (0)	18 (1.7)	19 (4.5)	**
Sampling times	50 (4.9)	69 (5.2)	2 (1.0)	35 (3.2)	7 (1.7)	**
Cortisol samples and/or sampling times	77 (7.5)	82 (6.2)	2 (1.0)	51 (4.7)	23 (5.5)	**

Missings in N (%); *Chi-square, * p<0.05; ** p<0.01

Table 6: Descriptive statistics of cortisol levels and corresponding outlier fences

	Mean	SD	Median	Q1	Q3	IQR	Outlier fence – 1 ⁺	Outlier fence - 2 ⁺	Outlier fence - 3 ⁺
Study 1									
<i>Sampling day 1</i>									
t(+0)	13.48	9.05	10.80	7.00	18.80	11.80	49.70 (0)	54.20 (0)	42.80 (0)
t(+30)	25.00	15.56	23.30	13.70	33.30	19.60	87.24 (0)	92.10 (0)	63.30 (4)
t(08:00)	12.56	8.76	10.70	6.60	16.80	10.20	47.61 (0)	47.40 (0)	35.10 (5)
t(11:00)	6.91	4.00	6.00	4.00	9.40	5.40	22.91 (0)	25.60 (0)	19.60 (0)
t(15:00)	5.40	3.87	4.70	2.70	6.40	3.70	20.86 (0)	17.50 (4)	11.50 (6)
t(20:00)	2.47	2.24	1.75	1.00	3.10	2.10	11.40 (0)	9.40 (4)	7.15 (5)
<i>Sampling day 2</i>									
t(+0)	14.11	8.95	12.30	6.80	19.10	12.30	49.89 (0)	56.00 (0)	39.50 (0)
t(+30)	24.20	14.70	21.20	12.60	34.80	22.20	82.99 (0)	101.40 (0)	75.60 (0)
t(08:00)	11.40	8.46	8.70	5.60	15.20	9.60	45.24 (1)	44.00 (1)	34.70 (4)
t(11:00)	6.50	3.98	5.50	3.80	8.50	4.70	22.43 (0)	22.60 (0)	17.50 (0)
t(15:00)	5.32	4.00	4.70	2.50	6.40	3.90	21.30 (1)	18.10 (3)	11.50 (6)
t(20:00)	2.57	2.22	1.90	0.80	3.40	2.60	11.43 (0)	11.20 (0)	7.90 (4)
Study 2									
<i>Sampling day 1</i>									
t(+0)	15.58	10.23	14.04	8.47	19.90	11.43	56.50 (2)	54.18 (3)	37.48 (11)
t(+30)	25.50	16.27	23.30	14.12	34.90	20.78	90.59 (1)	97.24 (0)	69.70 (4)
t(16:00)	6.01	5.95	4.50	2.90	7.40	4.50	29.79 (5)	20.90 (8)	16.10 (13)
t(20:00)	2.36	2.23	1.70	1.00	2.90	1.90	11.28 (3)	8.60 (9)	6.50 (17)
<i>Sampling day 2</i>									
t(+0)	16.12	10.27	14.20	8.70	20.80	12.10	57.22 (1)	57.10 (1)	40.60 (9)
t(+30)	24.87	14.12	23.25	15.40	33.15	17.75	81.35 (0)	86.40 (0)	62.85 (5)
t(16:00)	5.46	4.87	4.50	2.70	6.57	3.87	24.94 (4)	18.16 (7)	12.76 (21)
t(20:00)	2.72	3.41	1.98	1.00	3.30	2.30	16.37 (2)	10.20 (7)	7.26 (20)
<i>Sampling day 3</i>									
t(+0)	16.29	10.59	14.20	9.20	21.10	11.90	58.64 (1)	56.80 (1)	41.80 (9)
t(+30)	24.83	16.30	22.40	14.19	34.00	19.81	90.04 (1)	93.43 (1)	68.80 (9)
t(16:00)	5.80	5.29	4.44	2.90	7.10	4.20	26.95 (5)	19.70 (8)	15.08 (12)
t(20:00)	3.27	4.73	2.30	1.00	3.60	2.60	22.19 (6)	11.40 (13)	7.50 (21)

*outlier fence – 1: mean + (4 × SD); outlier fence – 2: Q3 + (3 × IQR); outlier fence – 3: Q2 + 4(Q1 – Q2); in brackets: number of extreme cortisol values/outliers.

Table 7: Single extreme cortisol outliers

Partici- pant #	Sampling day	time (hh:mm)	Out- lier 1	Out- lier 2	Out- lier 3	Extreme outlier (nmol/l)	Gender	Age (yrs.)	Occupational group
Study 1									
<i>Extreme awakening and morning cortisol values [t(+0), t(+30), t(08:00)]</i>									
P00217	1	05:50 [t(+30)]			×	66.00	female	43	nurse
P00506	1	10:15 [t(+30)]			×	66.00	female	31	nurse
P02301	1	06:46 [t(+30)]			×	66.00	female	52	teacher
P01105	2	08:04 [t(08:00)]			×	37.00	male	26	hotel
P02303	1	07:46 [t(08:00)]			×	37.00	male	53	teacher
P03101	1	07:52 [t(08:00)]			×	37.00	female	52	social service
P00209	2	09:42 [t(08:00)]	×	×	×	49.90	female	59	nurse
<i>Extreme afternoon cortisol values [15:00]</i>									
P00403	2	14:52			×	12.70	female	25	nurse
P01104	1	15:46		×	×	18.70	male	25	hotel staff
P03109	2	15:04		×	×	18.70	male	32	social service
P03209	1	15:02		×	×	18.70	female	46	social service
<i>Extreme evening cortisol values [20:00]</i>									
P00513	2	21:00			×	7.90	female	45	nurse
P01102	2	20:00			×	7.90	female	22	hotel staff
P02207	1	19:30			×	7.15	male	53	teacher
P02308	2	19:53			×	7.90	female	44	teacher
P03205	2	19:53			×	9.60	female	28	social service
P00307	1	20:43		×	×	9.60	female	23	nurse
P00510	1	20:35		×	×	9.60	female	36	nurse
P03108	1	20:05		×	×	9.60	female	25	social service
Study 2									
<i>Extreme awakening cortisol values [t(+0), t(+30)]</i>									
H00602	2	06:25 [t(+0)]			×	45.00	male	30	nurse
H02415	1	07:30 [t(+0)]			×	37.48	female	49	teacher
H02605	3	06:30 [t(+0)]			×	41.80	female	37	teacher
H02618	3	06:15 [t(+0)]			×	42.40	male	58	teacher
H02801	1	06:15 [t(+0)]			×	47.00	female	48	teacher
H02906	2	06:08 [t(+0)]			×	48.41	female	53	teacher
H02912	3	06:00 [t(+0)]			×	51.60	female	36	teacher
H03408	2	06:36 [t(+0)]			×	44.10	female	23	social service
H03808	2	06:00 [t(+0)]			×	53.30	male	45	social service
H03819	1	05:45 [t(+0)]			×	50.00	male	50	social service
H00625	2	05:27 [t(+30)]			×	70.90	female	40	nurse
H00642	2	05:50 [t(+30)]			×	71.00	male	44	nurse
H02609	2	06:52 [t(+30)]			×	77.90	female	49	teacher
H02619	3	06:00 [t(+30)]			×	79.60	female	53	teacher
H03412	1	05:45 [t(+30)]			×	71.30	female	47	social service

Outlier 1: cortisol values ranging above [mean + (4 × SD)]; outlier 2: cortisol values ranging above [Q3 + (3 × IQR)]; outlier 3: cortisol values ranging above [Q2 + 4(Q1 – Q2)].

Table 7 (continued)

Partici- pant #	Sampling day	time (hh:mm)	Out- lier 1	Out- lier 2	Out- lier 3	Extreme outlier (nmol/l)	Gender	Age (yrs.)	Occupational group
Study 2									
<i>Extreme afternoon cortisol values [16:00]</i>									
H00557	2	16:05			×	14.70	male	46	nurse
H00558	2	16:05			×	15.40	female	36	nurse
H00561	2	16:00			×	17.90	female	36	nurse
H00661	2	15:45			×	14.30	male	61	nurse
H00801	2	16:15			×	16.40	female	35	nurse
H02418	1	16:00			×	17.10	female	52	teacher
H02714	1	16:05			×	17.50	female	57	teacher
H03414	1	16:00			×	19.00	male	41	social service
H03416	2	16:00			×	16.39	female	37	social service
H03906	2	16:20			×	13.50	male	43	mixed group
H00644	3	16:00		×	×	26.70	female	38	nurse
H02602	1	16:25		×	×	23.60	female	54	teacher
H00685	1	16:30	×	×	×	37.30	male	45	nurse
H00803	1	16:00	×	×	×	36.80	female	34	nurse
H02513	3	16:03	×	×	×	32.00	female	57	teacher
H03706	2	16:00	×	×	×	34.00	female	39	social service
H03818	3	16:03	×	×	×	30.26	female	40	social service
H04602	1	16:00	×	×	×	42.49	female	29	mixed group
<i>Extreme evening cortisol values [20:00]</i>									
H00535	3	20:00			×	9.10	female	49	nurse
H00904	3	20:30			×	8.01	female	26	nurse
H01302	1	20:00			×	7.30	male	43	hotel staff
H01501	2	20:10			×	8.00	female	26	hotel staff
H02503	1	20:35			×	7.10	male	51	teacher
H02524	3	20:00			×	10.00	male	55	teacher
H02716	2	20:20			×	7.60	female	41	teacher
H02810	2	20:45			×	7.26	female	47	teacher
H03703	3	21:03			×	7.60	female	41	social service
H04104	1	20:30			×	7.70	female	--	mixed group
H01703	2	20:30		×	×	11.25	female	42	hotel staff
H02022	1	20:00		×	×	8.80	female	56	nurse
H02712	3	20:00		×	×	14.20	male	55	teacher
H02811	3	20:05		×	×	12.00	female	54	teacher
H03701	1	19:55		×	×	11.00	female	50	social service
H04110	3	20:00		×	×	15.40	male	58	mixed group
H31122	2	20:00		×	×	13.20	female	47	social service
H32092	3	20:00		×	×	14.60	female	48	social service
H02607	3	20:00	×	×	×	38.30	female	48	teacher
H03902	3	20:10	×	×	×	32.90	female	44	mixed group
H32102	3	20:00	×	×	×	23.10	female	--	social service

Outlier 1: cortisol values ranging above $[\text{mean} + (4 \times \text{SD})]$; outlier 2: cortisol values ranging above $[\text{Q3} + (3 \times \text{IQR})]$; outlier 3: cortisol values ranging above $[\text{Q2} + 4(\text{Q1} - \text{Q2})]$.

Table 8: Multiple extreme cortisol outliers

Partici- pant #	Sampling		Out- lier 1	Out- lier 2	Out- lier 3	Extreme outlier (nmol/l)	Gender	Age (yrs.)	Occupational group
	day	time (hh:mm)							
Study 1									
P02101	1	15:20			×	13.10	female	54	teacher
	2	08:03			×	36.70			
P02203	1	06:39 [t(+30)]			×	66.00	female	53	teacher
	1	08:03			×	35.10			
P03110	1	14:59			×	12.00	male	27	social service
	2	15:07			×	13.10			
P02202	1	08:02			×	37.00	female	53	teacher
	2	15:00		×	×	18.70			
P00402	1	15:16			×	18.70	female	36	nurse
	1	20:04			×	9.60			
	2	15:18			×	16.20			
P00514	1	08:10			×	37.00	male	30	nurse
	1	15:00		×	×	18.70			
	2	08:25			×	37.00			
	2	16:15	×	×	×	22.40			
Study 2									
H00531	1	05:55 [t(+30)]			×	87.90	female	57	nurse
	1	20:10			×	8.10			
H00548	2	16:00			×	13.40	female	42	nurse
	3	05:20 [t(+30)]			×	82.40			
H00552	2	20:00			×	8.20	female	49	nurse
	3	16:20			×	15.30			
H00611	1	20:30			×	8.10	female	26	nurse
	2	15:30			×	13.80			
H00626	1	20:00			×	7.60	female	30	nurse
	3	08:00 [t(+30)]			×	70.40			
H00673	3	16:15			×	16.80	male	43	nurse
	3	20:30			×	9.40			
H02606	2	08:17 [t(+30)]			×	69.50	female	47	teacher
	3	07:08 [t(+30)]			×	76.50			
H02615	1	19:55			×	7.00	male	52	teacher
	2	19:35			×	9.80			
H02617	2	05:45 [t(+0)]			×	46.20	female	52	teacher
	3	05:55 [t(+0)]			×	45.80			
H03403	2	16:04			×	13.90	female	23	social service
	3	20:15			×	7.80			
H03604	1	06:20 [t(+0)]			×	48.60	male	54	social service
	3	06:15 [t(+0)]			×	48.90			
H00633	1	16:30			×	20.70	female	41	nurse
	3	20:00			×	14.50			
H02417	1	06:45 [t(+0)]			×	40.30	female	56	teacher
	1	20:00			×	9.90			

Outlier 1: cortisol values ranging above [mean + (4 × SD)]; outlier 2: cortisol values ranging above [Q3 + (3 × IQR)]; outlier 3: cortisol values ranging above [Q2 + 4(Q1 – Q2)].

Table 8 (continued)

Partici- pant #	Sampling day	time (hh:mm)	Out- lier 1	Out- lier 2	Out- lier 3	Extreme outlier (nmol/l)	Gender	Age (yrs.)	Occupational group
Study 2									
H01301	1	20:15			×	8.80	male	33	hotel staff
	3	07:00 [t(+0)]			×	44.60			
H01606	1	20:10			×	9.20	female	36	hotel staff
	2	20:10			×	7.70			
H03812	1	05:20 [t(+0)]			×	55.30	female	27	social service
	2	20:30			×	8.20			
H00532	2	16:00		×	×	19.40	female	38	nurse
	3	20:00		×	×	12.70			
H00638	1	15:00		×	×	23.10	male	47	nurse
	2	20:00		×	×	16.20			
H00618	1	06:40 [t(+30)]			×	77.60	female	38	nurse
	3	06:30 [t(+0)]	×	×	×	70.40			
H00697	1	16:00	×	×	×	48.20	female	53	nurse
	2	20:00			×	7.40			
H02620	1	06:00 [t(+0)]	×	×	×	63.00	male	55	teacher
	2	16:00		×	×	24.00			
H31042	2	20:15	×	×	×	34.80	male	56	social service
	3	20:00		×	×	14.00			
H00627	2	05:15 [t(+30)]			×	66.80	male	44	nurse
	2	21:00			×	8.80			
	3	05:15 [t(+30)]			×	69.40			
H00645	1	06:03 [t(+0)]			×	41.40	male	47	nurse
	2	20:30		×	×	14.60			
	3	06:25 [t(+30)]			×	82.90			
H03709	1	20:10		×	×	10.40	female	53	social service
	2	22:10			×	9.80			
	3	16:00			×	16.00			
H00544	1	20:00			×	7.80	male	24	nurse
	2	05:40 [t(+0)]			×	49.30			
	3	20:00	×	×	×	26.90			
H00635	2	06:00 [t(+0)]			×	41.70	female	25	nurse
	2	15:45		×	×	18.60			
	3	15:30	×	×	×	28.10			
H02510	1	06:30 [t(+0)]			×	41.90	male	57	teacher
	1	20:00	×	×	×	18.10			
	2	16:00			×	12.90			
H02611	1	05:35 [t(+0)]	×	×	×	68.70	male	64	teacher
	2	06:16 [t(+0)]	×	×	×	86.00			
	2	16:07			×	13.30			
H02612	1	16:00		×	×	28.10	female	51	teacher
	1	20:00	×	×	×	11.60			
	2	19:30			×	9.80			

Outlier 1: cortisol values ranging above [mean + (4 × SD)]; outlier 2: cortisol values ranging above [Q3 + (3 × IQR)]; outlier 3: cortisol values ranging above [Q2 + 4(Q1 – Q2)].

Table 8 (continued)

Partici- pant #	Sampling day	time (hh:mm)	Out- lier 1	Out- lier 2	Out- lier 3	Extreme outlier (nmol/l)	Gender	Age (yrs.)	Occupational group
Study 2									
H02616	3	06:00 [t(+30)]			×	69.20	male	43	teacher
	3	16:00	×	×	×	45.10			
	3	20:00			×	10.00			
H04124	1	20:00	×	×	×	11.50	male	49	mixed group
	2	20:15		×	×	14.60			
	3	20:00			×	8.50			
H31052	1	16:15			×	18.60	female	45	social service
	2	16:15	×	×	×	27.00			
	3	16:30		×	×	23.50			
H00616	1	05:45 [t(+0)]	×		×	92.40	female	39	nurse
	2	05:15 [t(+30)]			×	41.50			
	2	16:00			×	13.90			
	2	20:00			×	9.60			
H00541	1	04:30 [t(+0)]			×	47.10	female	24	nurse
	2	15:57			×	14.10			
	3	04:45 [t(+0)]			×	54.50			
	3	05:15 [t(+30)]	×	×	×	101.80			
H00805	3	06:00 [t(+0)]			×	56.40	female	21	nurse
	3	06:30 [t(+30)]			×	73.70			
	3	16:10	×	×	×	34.30			
	3	20:00	×	×	×	40.70			
H01504	2	15:40	×	×	×	40.60	female	24	hotel staff
	2	20:00	×	×	×	29.10			
	3	16:00		×	×	21.40			
	3	20:00	×	×	×	23.30			
H04105	1	16:00	×	×	×	30.70	female	45	mixed group
	2	16:00	×	×	×	34.60			
	2	20:00			×	7.90			
	3	16:00			×	19.60			

Outlier 1: cortisol values ranging above [mean + (4 × SD)]; outlier 2: cortisol values ranging above [Q3 + (3 × IQR)]; outlier 3: cortisol values ranging above [Q2 + 4(Q1 – Q2)].

Table 9: Number of compliant and non-compliant measurements (study 1)

	Electronically monitored (n= 69)				Not monitored (n= 33)	
	Verified		Self-reported		Self-reported	
	compliant	non-compl.	compliant	non-compl.	compliant	non-compl.
Day 1						
t(+30)	56 (90.3)	6 (9.7)	57 (93.4)	4 (6.6)	33 (100)	0
t(08:00)	58 (93.5)	4 (6.5)	56 (91.8)	5 (8.2)	28 (96.6)	1 (3.4)
t(11:00)	58 (92.1)	5 (7.9)	57 (93.4)	4 (6.6)	29 (96.7)	1 (3.3)
t(15:00)	61 (93.9)	4 (6.2)	61 (96.8)	2 (3.2)	28 (93.3)	2 (6.7)
t(20:00)	57 (89.1)	7 (10.9)	57 (95.0)	3 (5.0)	26 (92.9)	2 (7.1)
Day 2						
t(+30)	60 (89.6)	7 (10.4)	63 (96.9)	2 (3.1)	32 (100)	0
t(08:00)	58 (90.6)	6 (9.4)	56 (93.3)	4 (6.7)	28 (96.6)	1 (3.4)
t(11:00)	56 (87.5)	8 (12.5)	54 (91.5)	5 (8.5)	27 (93.1)	2 (6.9)
t(15:00)	49 (77.8)	14 (22.2)	53 (88.3)	7 (11.7)	23 (82.1)	5 (17.9)
t(20:00)	50 (84.7)	9 (15.3)	49 (92.4)	4 (7.6)	26 (92.9)	2 (7.1)

Values are N (%)

Table 10: Number of compliant and non-compliant measurements and deviation in minutes (study 2)

	Self-reported, not electronically monitored (n= 331)			
	Compliant		Non-compliant	
	N (%)	Mean ± SD*	N (%)	Mean ± SD*
Day 1				
t(+30)	295 (96.1 %)	0:01 ± 0:02	12 (3.9 %)	0:34 ± 0:27
t(16:00)	312 (98.1 %)	0:08 ± 0:14	6 (1.9 %)	2:42 ± 1:42
t(20:00)	302 (97.7 %)	0:07 ± 0:11	7 (2.3 %)	1:48 ± 0:36
Day 2				
t(+30)	286 (92.3 %)	0:01 ± 0:03	24 (7.7 %)	0:35 ± 0:24
t(16:00)	311 (96.0 %)	0:08 ± 0:12	13 (4.0 %)	1:54 ± 0:42
t(20:00)	299 (98.0 %)	0:09 ± 0:15	6 (2.0 %)	1:51 ± 0:31
Day 3				
t(+30)	286 (93.2 %)	0:01 ± 0:03	21 (6.8 %)	0:35 ± 0:30
t(16:00)	307 (97.5 %)	0:09 ± 0:14	8 (2.5 %)	2:10 ± 1:38
t(20:00)	301 (96.8 %)	0:09 ± 0:13	10 (3.2 %)	1:46 ± 0:56

*Values are hh:mm

Table 11: Deviation in minutes from sampling protocol (study 1)

	Electronically monitored (n= 69)				Not monitored (n= 33)	
	Verified		Self-reported		Self-reported	
	compliant	non-compl.	compliant	non-compl.	compliant	non-compl.
Day 1						
t(+30)	0:03 ± 0:03	0:16 ± 0:04	0:01 ± 0:02	0:21 ± 0:09	0:01 ± 0:02	--*
t(08:00)	0:08 ± 0:08	2:35 ± 0:51	0:06 ± 0:08	2:57 ± 1:24	0:07 ± 0:12	--*
t(11:00)	0:10 ± 0:13	3:30 ± 2:29	0:11 ± 0:14	3:32 ± 2:52	0:14 ± 0:22	--*
t(15:00)	0:12 ± 0:14	3:56 ± 1:43	0:10 ± 0:12	3:22 ± 2:39	0:12 ± 0:18	1:40 ± 0:49
t(20:00)	0:11 ± 0:13	4:26 ± 2:10	0:10 ± 0:14	2:18 ± 1:04	0:14 ± 0:15	1:17 ± 0:18
Day 2						
t(+30)	0:03 ± 0:03	0:14 ± 0:03	0:02 ± 0:03	0:13 ± 0:02	0:01 ± 0:02	--*
t(08:00)	0:09 ± 0:11	3:03 ± 1:05	0:06 ± 0:09	3:27 ± 1:07	0:13 ± 0:17	--*
t(11:00)	0:13 ± 0:15	3:21 ± 1:12	0:13 ± 0:18	3:05 ± 1:27	0:17 ± 0:16	2:45 ± 0:21
t(15:00)	0:12 ± 0:12	3:33 ± 2:23	0:13 ± 0:16	3:51 ± 2:30	0:15 ± 0:17	2:13 ± 1:35
t(20:00)	0:12 ± 0:13	2:30 ± 1:09	0:12 ± 0:17	2:37 ± 1:03	0:20 ± 0:23	2:45 ± 0:21

Values are hh:mm, mean ± standard deviation, --* < 2 indicated sampling times

Table 12: Descriptive statistics of time interval between t(+0) and t(+30)

	N	Mean	SD	MD	MIN	MAX	F	p
Study 1								
Day 1 + 2	192	0:32	0:04	0:30	0:21	0:51	0.98	n.s.
Day 1	95	0:32	0:04	0:31	0:21	0:51		
Day 2	97	0:31	0:04	0:30	0:23	0:48		
Study 2								
Day 1-3	915	0:32	0:10	0:30	0:10	2:45	1.89	n.s.
Day 1	305	0:31	0:08	0:30	0:20	2:00		
Day 2	307	0:32	0:11	0:30	0:10	2:00		
Day 3	303	0:32	0:11	0:30	0:15	2:45		

Values are hh:mm; mixed models for repeated measures: *p< 0.05; **p< 0.01

Table 13: Descriptive statistics of post-awakening cortisol levels by sampling time interval

	Time interval: t(+0) to t(+30)				F	p
	0-19 min.	20-40 min.	41-60 min.	> 60 min.		
Study 1, N⁺	0	179	13	0		
Duration of time interval [§]	--	0:31 ± 0:03	0:45 ± 0:03	--	--	--
Cortisol awakening rise [#]	--	10.72 ± 13.63	11.96 ± 13.00	--	0.14	n.s.
Morning cortisol release [#]	--	19.26 ± 10.60	19.53 ± 8.39	--	1.59	n.s.
Cortisol at t(+0) [#]	--	13.90 ± 9.07	13.55 ± 9.10	--	0.52	n.s.
Cortisol at t(+30) [#]	--	24.95 ± 15.36	23.87 ± 13.71	--	0.00	n.s.
CAR responder, N⁺	0	129	9	0		
Cortisol awakening rise [#]	--	16.08 ± 12.01	18.04 ± 10.76	--	--	--
Morning cortisol release [#]	--	20.79 ± 10.33	22.13 ± 8.85	--	--	--
Cortisol at t(+0) [#]	--	12.74 ± 7.65	13.11 ± 11.01	--	--	--
Cortisol at t(+30) [#]	--	28.52 ± 15.13	30.97 ± 13.98	--	--	--
CAR non-responder, N⁺	0	50	4	0		
Cortisol awakening rise [#]	--	-3.10 ± 5.26	-1.72 ± 2.51	--	--	--
Morning cortisol release [#]	--	15.33 ± 10.38	13.69 ± 2.64	--	--	--
Cortisol at t(+0) [#]	--	16.88 ± 11.55	14.55 ± 2.44	--	--	--
Cortisol at t(+30) [#]	--	16.41 ± 12.34	14.40 ± 5.17	--	--	--
Study 2, N⁺	5	867	28	15		
Duration of time interval [§]	0:13 ± 0:02	0:30 ± 0:02	0:48 ± 0:05	1:41 ± 0:25	--	--
Cortisol awakening rise [#]	8.04 ± 9.50	9.45 ± 15.42	0.26 ± 18.83	7.78 ± 13.68	3.85	*
Morning cortisol release [#]	22.22 ± 11.87	20.54 ± 10.78	21.72 ± 9.75	20.18 ± 8.87	0.37	n.s.
Cortisol at t(+0) [#]	24.42 ± 13.59	15.96 ± 10.27	18.16 ± 12.35	14.40 ± 7.20	0.85	n.s.
Cortisol at t(+30) [#]	25.91 ± 19.27	25.30 ± 15.71	22.78 ± 17.54	23.99 ± 15.30	0.20	n.s.
CAR responder, N⁺	3	598	13	11		
Cortisol awakening rise [#]	14.43 ± 4.70	16.69 ± 11.94	14.12 ± 10.29	13.25 ± 9.56	--	--
Morning cortisol release [#]	22.55 ± 11.27	22.34 ± 10.45	24.84 ± 10.81	22.87 ± 8.88	--	--
Cortisol at t(+0) [#]	36.00 ± 2.69	14.33 ± 8.82	16.43 ± 10.27	13.49 ± 6.71	--	--
Cortisol at t(+30) [#]	40.60 ± 8.16	28.40 ± 15.64	29.91 ± 18.38	28.22 ± 14.82	--	--
CAR non-responder, N⁺	2	269	15	4		
Cortisol awakening rise [#]	-1.55 ± 3.18	-6.64 ± 8.59	-11.75 ± 16.12	-7.26 ± 12.56	--	--
Morning cortisol release [#]	10.73 ± 3.01	16.54 ± 10.42	19.01 ± 8.14	12.77 ± 2.22	--	--
Cortisol at t(+0) [#]	12.85 ± 3.32	19.51 ± 12.15	19.35 ± 13.79	17.44 ± 9.48	--	--
Cortisol at t(+30) [#]	6.33 ± 2.77	18.61 ± 13.66	16.98 ± 14.98	10.25 ± 6.34	--	--

⁺ Study 1: 102 participants × 2 sampling days = 204 measurements, study 2: 331 participants × 3 sampling days = 993 measurements; [§] values are hh:mm, mean ± SD; [#] cortisol values are nmol/l, mean ± SD; mixed models for repeated measures: * p < 0.05; ** p < 0.01; CAR responder: increase in cortisol of at least 2.5 nmol/l above individual baseline 30 minutes after awakening (see text); CAR non-responder: increase in cortisol of less than 2.5 nmol/l above individual baseline 30 minutes after awakening (see text).

Table 14: Descriptive statistics of absolute sampling times (clock time)

	N	Mean	SD	Median	Min	Max	F	p	
Study 1									
t(08:00)	Day 1 + 2	184	08:16	0:43	08:03	07:46	12:49	2.77	n.s.
	Day 1	91	08:11	0:35	08:02	07:46	11:10		
	Day 2	93	08:20	0:50	08:03	07:46	12:49		
t(11:00)	Day 1 + 2	186	11:26	1:01	11:06	10:21	18:22	3.17	n.s.
	Day 1	93	11:21	1:00	11:03	10:21	18:22		
	Day 2	93	11:31	1:02	11:11	10:41	15:38		
t(15:00)	Day 1 + 2	186	15:28	1:20	15:04	12:12	23:20	9.94	**
	Day 1	95	15:19	0:54	15:04	14:01	20:10		
	Day 2	91	15:37	1:41	15:07	12:12	23:20		
t(20:00)	Day 1 + 2	178	20:17	0:48	20:04	16:31	23:54	0.99	n.s.
	Day 1	91	20:14	0:36	20:04	18:47	23:17		
	Day 2	87	20:19	0:59	20:03	16:13	23:54		
Study 2									
t(16:00)	Day 1+2+3	957	16:03	0:29	16:00	10:00	19:30	1.82	n.s.
	Day 1	318	16:02	0:30	16:00	10:00	18:15		
	Day 2	324	16:05	0:27	16:00	13:00	19:30		
	Day 3	315	16:03	0:30	16:00	10:00	17:40		
t(20:00)	Day 1+2+3	925	20:07	0:22	20:00	16:05	23:00	1.20	n.s.
	Day 1	309	20:07	0:20	20:00	19:30	23:00		
	Day 2	305	20:08	0:22	20:00	19:00	22:30		
	Day 3	311	20:06	0:25	20:00	16:05	22:00		

Values are hh:mm; mixed models for repeated measures: *p< 0.05; **p< 0.01

Table 15: Descriptive statistics of diurnal cortisol levels by sampling time windows (clock time)

	Time windows for scheduled sampling time (clock time)					
	> 60 min. before		± 60 min. within		> 60 min. after	
	N	Mean ± SD	N	Mean ± SD	N	Mean ± SD
Study 1						
Cortisol at t(08:00)	0	--	172	12.11 ± 8.22	12	9.93 ± 13.32
Cortisol at t(11:00)	0	--	170	6.84 ± 4.00	16	5.31 ± 3.70
Cortisol at t(15:00)	2	7.05 ± 4.88	161	5.57 ± 3.82	23	3.74 ± 4.32
Cortisol at t(20:00)	3	4.60 ± 2.78	159	2.56 ± 2.27	16	1.78 ± 1.31
Study 2						
Cortisol at t(16:00)	7	4.32 ± 2.38	930	5.81 ± 5.44	20	3.56 ± 1.83
Cortisol at t(20:00)	3	2.61 ± 2.08	902	2.80 ± 3.65	20	1.97 ± 2.53

Values are nmol/l; mixed models for repeated measures: *p< 0.05; **p< 0.01

Table 16: Descriptive statistics of relative sampling times (synchronised to awakening)

	N	Mean	SD	Median	Q ₁	Q ₃	Min	Max	F	p	
Study 1											
t(08:00)	Day 1 + 2	181	02:26	0:42	02:26	02:00	02:52	00:41	05:33	0.12	n.s.
	Day 1	90	02:26	0:38	02:24	02:00	02:54	01:06	04:30		
	Day 2	91	02:25	0:46	02:29	01:59	02:51	00:41	05:33		
t(11:00)	Day 1 + 2	182	05:30	0:56	05:27	05:02	05:55	02:52	09:59	0.05	n.s.
	Day 1	91	05:28	0:52	05:23	04:59	05:50	03:00	09:29		
	Day 2	91	05:32	1:00	05:28	05:03	05:59	02:52	09:59		
t(15:00)	Day 1 + 2	181	09:35	1:07	09:32	09:00	10:01	03:54	15:08	1.89	n.s.
	Day 1	92	09:32	0:45	09:36	09:01	10:01	07:39	11:17		
	Day 2	89	09:37	1:25	09:27	09:00	10:00	03:54	15:08		
t(20:00)	Day 1 + 2	174	14:26	0:52	14:30	14:03	14:55	10:34	18:01	0.2	n.s.
	Day 1	89	14:28	0:49	14:30	14:03	14:55	12:17	18:01		
	Day 2	85	14:24	0:56	14:30	14:03	14:55	10:34	17:36		
Study 2											
t(16:00)	Day 1+2+3	925	09:56	0:59	10:00	09:30	10:33	02:00	12:45	1.24	n.s.
	Day 1	305	09:57	0:58	10:00	09:33	10:30	02:30	12:00		
	Day 2	314	09:58	0:56	10:00	09:30	10:32	05:55	12:40		
	Day 3	306	09:54	1:03	10:00	09:30	10:37	02:00	12:45		
t(20:00)	Day 1+2+3	896	13:59	0:54	14:00	13:30	14:35	09:40	16:50	2.71	n.s.
	Day 1	298	14:02	0:51	14:00	13:30	14:35	11:15	16:50		
	Day 2	296	14:01	0:54	14:00	13:30	14:40	10:55	16:50		
	Day 3	302	13:55	0:55	14:00	13:25	14:33	09:40	16:30		

Values are hh:mm; mixed models for repeated measures: *p< 0.05; **p< 0.01; Q₁: 25th percentile, lower quartile; Q₃: 75th percentile, upper quartile.

Table 17: Descriptive statistics of diurnal cortisol levels by sampling time windows (time intervals synchronised to awakening)

	Time windows for scheduled sampling time (relative time)						F	p
	Below IQR		Within IQR		Above IQR			
	N	Mean ± SD	N	Mean ± SD	N	Mean ± SD		
Study 1								
Cortisol at t(08:00)	44	14.37 ± 10.99	90	11.37 ± 7.65	47	10.85 ± 7.51	2.13	n.s.
Cortisol at t(11:00)	44	6.87 ± 4.23	92	6.68 ± 3.80	46	6.60 ± 4.03	0.09	n.s.
Cortisol at t(15:00)	43	5.58 ± 3.70	92	5.65 ± 3.98	46	4.65 ± 4.11	2.90	n.s.
Cortisol at t(20:00)	43	3.02 ± 2.77	86	2.39 ± 1.95	45	2.30 ± 2.16	1.36	n.s.
Study 2								
Cortisol at t(16:00)	218	5.79 ± 5.55	428	5.70 ± 4.95	232	5.60 ± 5.50	0.19	n.s.
Cortisol at t(20:00)	207	3.00 ± 4.36	457	2.76 ± 3.68	232	2.61 ± 2.89	0.38	n.s.

Values are nmol/l; mixed models for repeated measures: *p< 0.05; **p< 0.01; IQR: interquartile range (difference between third and first quartile)

Table 18: Descriptive statistics of awakening time

	Mean*	SD*	Median*	Min*	Max*	F	P
Study 1							
Day 1 / n= 102	05:50	0:54	05:45	04:15	09:45	3.31	n.s.
Day 2 / n= 102	06:01	1:04	05:52	04:04	10:00		
Study 2							
Day 1 / n= 316	06:04	0:47	06:00	04:10	08:45	2.19	n.s.
Day 2 / n= 321	06:07	0:49	06:00	04:15	08:35		
Day 3 / n= 319	06:09	0:51	06:00	03:30	08:30		

* Values are hh:mm; mixed models for repeated measures: *p<0.05; ** p<0.01

Table 19: Descriptive statistics of sleep duration

	Mean*	SD*	Median*	Min*	Max*	F	p
Study 2							
Night 1 / n= 325	6:40	1:08	6:37	2:30	15:00	6.02	**
Night 2 / n= 323	6:47	1:09	6:45	2:15	12:11		
Night 3 / n= 316	6:55	1:13	6:50	3:30	12:45		

* Values are hh:mm; mixed models for repeated measures: *p<0.05; ** p<0.01

Table 20: Descriptive statistics of cortisol levels and sleep deprivation

Cortisol levels	No sleep deprivation		Sleep deprivation		F	p
	N	Mean ± SD	N	Mean ± SD		
Study 1						
t(+0)	115	13.74 ± 8.93	73	14.05 ± 9.16	0.02	n.s.
t(+30)	114	24.07 ± 14.59	72	25.94 ± 15.78		
t(08:00)	107	11.03 ± 7.66	69	12.97 ± 9.21		
t(11:00)	106	6.37 ± 3.49	71	7.06 ± 4.50		
t(15:00)	112	4.94 ± 2.88	66	6.02 ± 4.84		
t(20:00)	109	2.98 ± 2.00	65	2.62 ± 2.45	0.33	n.s.
Cortisol awakening rise	113	10.22 ± 13.98	72	11.83 ± 13.15		
Total morning cortisol release	116	18.82 ± 9.93	73	19.89 ± 11.11	0.77	n.s.
Total diurnal cortisol release						
Mean [with t(+30)]	109	10.63 ± 4.69	68	11.49 ± 5.75	0.18	n.s.
Mean [without t(+30)]	109	7.81 ± 3.40	68	8.73 ± 4.58	0.00	n.s.
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	105	22.06 ± 14.35	64	22.44 ± 14.97	0.04	n.s.
Delta [t(+0) – t(20:00)]	106	11.83 ± 8.66	65	11.01 ± 9.30	2.38	n.s.

Values are nmol/l; mixed models for repeated measures: *p< 0.05; **p< 0.01

Table 21: Descriptive statistics of duration of sleep disruption episodes

	Mean*	SD*	Median*	Min*	Max*	F	p
Study 2							
Night 1 / n= 218	0:25	0:42	0:10	0:01	4:00		
Night 2 / n= 183	0:22	0:31	0:10	0:01	4:00	2.80	n.s.
Night 3 / n= 159	0:23	0:29	0:10	0:01	3:00		

*Values are h:mm; mixed models for repeated measures: *p<0.05; ** p<0.01

Table 22: Association between duration of sleep disruption episodes and cortisol levels

	Sleep disruption (hh:mm)							
	Night 1+2+3		Night 1		Night 2		Night 3	
	N	r ⁺	N	r	N	r	N	r
Study 2								
t(+0)	766	.04	261	.05	258	.11	247	-.04
t(+30)	760	-.07*	265	-.08	253	.01	242	-.13*
t(16:00)	767	-.02	265	.02	260	-.03	242	-.08
t(20:00)	740	.06	260	.09	245	.08	235	.02
Cortisol awakening rise	741	-.10**	255	-.12	248	-.09	238	-.09
Total morning cortisol release	766	-.03	261	-.02	258	.05	247	-.11
Total diurnal cortisol release								
Mean [with t(+30)]	770	-.06	266	-.04	257	.01	247	-.14*
Mean [without t(+30)]	770	.00	266	.03	257	.06	247	-.08
AUC [with t(+30)]	770	-.07*	266	-.03	257	-.10	247	-.11
AUC [without t(+30)]	755	-.02	259	.00	255	.07	241	-.12
Diurnal cortisol decline								
Slope [without t(+0)]	770	.08*	266	.09	257	.07	247	.07
Slope [without t(+30)]	770	-.02	266	-.02	257	-.09	247	.03
Delta [t(+30) – t(20:00)]	713	-.07	250	-.10	236	-.01	227	-.08
Delta [t(+0) – t(20:00)]	719	.03	249	.02	239	.08	231	-.01

⁺Pearson correlation coefficients; * p< 0.05; ** p< 0.01.

Table 23: Descriptive statistics of cortisol levels in men

	Men					
	Day 1		Day 2		Day 3	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1						
t(+0)	21	14.20 \pm 10.85	20	17.14 \pm 9.11	--	--
t(+30)	20	22.66 \pm 10.78	19	27.54 \pm 14.26	--	--
t(08:00)	21	15.37 \pm 9.45	20	13.37 \pm 9.44	--	--
t(11:00)	22	9.21 \pm 4.52	20	8.00 \pm 4.20	--	--
t(15:00)	21	7.05 \pm 4.77	19	7.08 \pm 5.60	--	--
t(20:00)	20	2.19 \pm 1.82	19	1.68 \pm 0.98	--	--
Cortisol awakening rise	20	8.25 \pm 10.77	18	9.92 \pm 14.40	--	--
Total morning cortisol release	21	18.12 \pm 9.46	21	21.77 \pm 9.84	--	--
Total diurnal cortisol release						
Mean [with t(+30)]	21	11.82 \pm 4.16	18	12.06 \pm 4.70	--	--
Mean [without t(+30)]	21	9.75 \pm 4.00	18	9.04 \pm 3.47	--	--
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	18	21.44 \pm 11.10	18	25.48 \pm 14.49	--	--
Delta [t(+0) – t(20:00)]	18	12.44 \pm 11.62	18	15.96 \pm 9.37	--	--
Study 2						
t(+0)	100	16.66 \pm 12.14	101	18.47 \pm 12.33	102	17.36 \pm 10.34
t(+30)	103	23.35 \pm 14.92	100	24.26 \pm 14.83	102	23.57 \pm 15.39
t(16:00)	103	6.34 \pm 5.10	104	5.79 \pm 3.94	103	6.18 \pm 5.68
t(20:00)	95	2.64 \pm 2.61	102	3.06 \pm 4.20	104	3.17 \pm 3.75
Cortisol awakening rise	99	6.84 \pm 13.81	97	5.90 \pm 16.27	99	6.21 \pm 15.40
Total morning cortisol release	100	19.94 \pm 11.54	101	21.36 \pm 11.25	102	20.32 \pm 10.80
Total diurnal cortisol release						
Mean [with t(+30)]	100	12.43 \pm 6.15	104	12.73 \pm 6.49	103	12.38 \pm 6.20
Mean [without t(+30)]	100	8.75 \pm 4.86	104	9.18 \pm 5.32	103	8.86 \pm 4.65
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	93	21.41 \pm 15.02	96	21.03 \pm 15.29	100	20.72 \pm 15.65
Delta [t(+0) – t(20:00)]	91	14.31 \pm 12.16	97	15.30 \pm 12.66	100	14.35 \pm 10.33

Values are nmol/l

Table 24: Descriptive statistics of cortisol levels in women

	Women					
	Day 1		Day 2		Day 3	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1						
t(+0)	76	13.28 \pm 8.56	79	13.34 \pm 8.80	--	--
t(+30)	75	25.63 \pm 16.61	80	23.41 \pm 14.78	--	--
t(08:00)	70	11.71 \pm 8.44	73	10.86 \pm 8.16	--	--
t(11:00)	71	6.19 \pm 3.57	73	6.09 \pm 3.85	--	--
t(15:00)	74	4.93 \pm 3.46	72	4.85 \pm 3.35	--	--
t(20:00)	72	2.54 \pm 2.34	68	2.82 \pm 2.40	--	--
Cortisol awakening rise	75	12.26 \pm 14.50	79	10.28 \pm 13.16	--	--
Total morning cortisol release	76	19.33 \pm 11.08	80	18.33 \pm 10.23	--	--
Total diurnal cortisol release						
Mean [with t(+30)]	71	10.79 \pm 5.20	74	10.49 \pm 5.45	--	--
Mean [without t(+30)]	71	7.82 \pm 3.61	74	7.80 \pm 4.15	--	--
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	70	22.67 \pm 16.20	68	20.26 \pm 14.28	--	--
Delta [t(+0) – t(20:00)]	71	10.66 \pm 8.64	67	10.89 \pm 8.37	--	--
Study 2						
t(+0)	216	15.07 \pm 9.21	220	15.04 \pm 9.01	217	15.78 \pm 10.69
t(+30)	214	26.54 \pm 16.82	216	25.15 \pm 13.80	212	25.43 \pm 16.73
t(16:00)	215	5.85 \pm 6.31	220	5.30 \pm 5.25	212	5.62 \pm 5.09
t(20:00)	214	2.23 \pm 2.03	203	2.55 \pm 2.93	207	3.32 \pm 5.16
Cortisol awakening rise	208	11.42 \pm 16.45	213	9.98 \pm 14.41	208	9.71 \pm 15.84
Total morning cortisol release	216	20.54 \pm 10.96	220	19.83 \pm 9.29	217	20.49 \pm 11.83
Total diurnal cortisol release						
Mean [with t(+30)]	220	12.29 \pm 5.94	216	12.18 \pm 5.52	219	12.47 \pm 6.92
Mean [without t(+30)]	220	7.78 \pm 3.97	216	7.85 \pm 4.10	219	8.32 \pm 5.14
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	204	24.36 \pm 16.71	197	22.50 \pm 12.98	198	21.94 \pm 16.41
Delta [t(+0) – t(20:00)]	207	13.08 \pm 9.59	199	12.72 \pm 9.42	202	12.48 \pm 10.51

Values are nmol/l

Table 25: Descriptive statistics of cortisol levels in women without oral contraceptives

	Day 1		Day 2		Day 3	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1						
t(+0)	58	13.44 \pm 8.75	60	13.25 \pm 8.60	--	--
t(+30)	57	25.61 \pm 16.31	61	23.65 \pm 14.89	--	--
t(08:00)	53	10.02 \pm 7.34	56	10.01 \pm 7.75	--	--
t(11:00)	53	5.94 \pm 3.38	56	5.77 \pm 3.71	--	--
t(15:00)	56	4.68 \pm 2.96	56	4.68 \pm 3.09	--	--
t(20:00)	54	2.37 \pm 2.16	51	2.62 \pm 2.31	--	--
Cortisol awakening rise	57	12.04 \pm 14.71	60	10.68 \pm 13.35	--	--
Total morning cortisol release	58	19.36 \pm 10.88	61	18.40 \pm 10.16	--	--
Total diurnal cortisol release						
Mean [with t(+30)]	53	10.47 \pm 4.84	56	10.21 \pm 5.23	--	--
Mean [without t(+30)]	53	7.44 \pm 3.21	56	7.48 \pm 4.00	--	--
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	52	22.68 \pm 16.13	51	20.85 \pm 14.63	--	--
Delta [t(+0) – t(20:00)]	53	10.99 \pm 9.04	50	10.92 \pm 8.02	--	--
Study 2						
t(+0)	137	14.44 \pm 8.07	140	14.92 \pm 8.36	137	15.54 \pm 10.14
t(+30)	135	27.88 \pm 16.43	134	26.03 \pm 13.75	133	25.04 \pm 14.89
t(16:00)	136	5.94 \pm 5.88	138	5.56 \pm 6.05	133	5.52 \pm 4.96
t(20:00)	134	2.37 \pm 2.29	124	2.57 \pm 3.41	129	3.32 \pm 5.41
Cortisol awakening rise	132	13.48 \pm 16.17	134	10.96 \pm 15.16	130	9.67 \pm 16.01
Total morning cortisol release	137	20.89 \pm 10.30	140	20.11 \pm 8.66	137	20.21 \pm 10.41
Total diurnal cortisol release						
Mean [with t(+30)]	138	12.61 \pm 5.58	134	12.60 \pm 5.34	138	12.22 \pm 5.67
Mean [without t(+30)]	138	7.69 \pm 3.62	134	8.04 \pm 4.15	138	8.16 \pm 4.62
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	128	25.28 \pm 16.28	119	23.77 \pm 13.10	123	21.87 \pm 15.94
Delta [t(+0) – t(20:00)]	131	12.20 \pm 8.48	122	12.63 \pm 9.11	126	12.43 \pm 11.03

Values are nmol/l

Table 26: Descriptive statistics of cortisol levels in women using oral contraceptives

	Day 1		Day 2		Day 3	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1						
t(+0)	16	11.43 \pm 7.02	17	13.32 \pm 10.08	--	--
t(+30)	16	22.84 \pm 15.78	17	19.44 \pm 11.82	--	--
t(08:00)	15	16.62 \pm 10.19	15	11.83 \pm 7.12	--	--
t(11:00)	16	6.33 \pm 3.87	15	6.29 \pm 3.60	--	--
t(15:00)	16	5.18 \pm 4.62	14	5.31 \pm 4.49	--	--
t(20:00)	16	2.95 \pm 2.97	16	3.21 \pm 2.59	--	--
Cortisol awakening rise	16	11.41 \pm 10.76	17	6.12 \pm 9.96	--	--
Total morning cortisol release	16	17.13 \pm 10.96	17	16.38 \pm 9.79	--	--
Total diurnal cortisol release						
Mean [with t(+30)]	16	10.78 \pm 5.87	16	10.15 \pm 5.36	--	--
Mean [without t(+30)]	16	8.33 \pm 4.35	16	8.09 \pm 4.24	--	--
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	16	19.89 \pm 14.31	16	16.58 \pm 11.30	--	--
Delta [t(+0) – t(20:00)]	16	8.48 \pm 6.44	16	10.64 \pm 9.88	--	--
Study 2						
t(+0)	47	16.59 \pm 11.32	47	15.82 \pm 10.51	47	18.29 \pm 13.26
t(+30)	46	22.55 \pm 19.06	47	25.39 \pm 13.35	46	29.76 \pm 20.91
t(16:00)	46	5.60 \pm 6.12	48	5.36 \pm 4.00	47	6.17 \pm 5.30
t(20:00)	46	1.98 \pm 1.38	48	2.91 \pm 2.08	45	3.91 \pm 5.89
Cortisol awakening rise	45	10.92 \pm 16.37	46	9.39 \pm 9.89	45	11.25 \pm 13.76
Total morning cortisol release	47	21.81 \pm 13.50	47	20.41 \pm 10.91	47	23.81 \pm 16.03
Total diurnal cortisol release						
Mean [with t(+30)]	48	12.85 \pm 7.31	48	12.10 \pm 5.66	48	14.51 \pm 10.12
Mean [without t(+30)]	48	8.14 \pm 4.49	48	7.98 \pm 4.01	48	9.63 \pm 6.93
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	44	26.19 \pm 19.36	47	22.49 \pm 13.36	43	24.78 \pm 17.03
Delta [t(+0) – t(20:00)]	45	14.93 \pm 11.78	47	12.92 \pm 10.31	44	13.99 \pm 10.60

Values are nmol/l

Table 27: Effect of intake of oral contraceptives on cortisol levels in women of study 1

Dependent variable	Effect	NDF	DDF	F	p
Study 1					
Single samples: t(+0), t(+30), t(08:00), t(11:00), t(15:00), t(20:00)	DAY	1	74	0.10	
	TIME	5	367	189.25	**
	OC	1	76	0.05	
	DAY × OC	1	74	0.08	
	TIME × OC	5	367	2.32	*
Cortisol awakening rise					
	DAY	1	70	0.30	
	OC	1	76	0.56	
	DAY × OC	1	70	1.30	
Total morning cortisol release					
	DAY	1	72	0.07	
	OC	1	76	0.71	
	DAY × OC	1	72	0.06	
Total diurnal cortisol release					
Mean [with t(+30)]	DAY	1	65	0.43	
	OC	1	72	0.02	
	DAY × OC	1	65	0.04	
Mean [without t(+30)]	DAY	1	65	0.19	
	OC	1	72	0.15	
	DAY × OC	1	65	0.02	
AUC [with t(+30)]	DAY	1	65	2.74	
	OC	1	72	0.37	
	DAY × OC	1	65	1.08	
AUC [without t(+30)]	DAY	1	65	0.14	
	OC	1	72	0.76	
	DAY × OC	1	65	0.98	
Diurnal cortisol decline					
Slope [without t(+0)]	DAY	1	65	0.50	
	OC	1	72	0.15	
	DAY × OC	1	65	1.45	
Slope [without t(+30)]	DAY	1	65	0.01	
	OC	1	72	0.01	
	DAY × OC	1	65	0.06	
Delta [t(+30) – t(20:00)]	DAY	1	60	0.89	
	OC	1	71	0.66	
	DAY × OC	1	60	0.27	
Delta [t(+0) – t(20:00)]	DAY	1	59	0.07	
	OC	1	72	0.37	
	DAY × OC	1	59	1.05	

NDF= numerator degrees of freedom; DDF= denominator degrees of freedom; DAY= sampling day; OC= intake of oral contraceptives; TIME= sampling time (t(+0) to t(20:00)); mixed models for repeated measures:

*p<0.05; ** p<0.01

Table 28: Effect of intake of oral contraceptives on cortisol levels in women of study 2

Dependent variable	Effect	NDF	DDF	F	p
Study 2					
Single samples: t(+0), t(+30), t(16:00), t(20:00)	DAY	2	374	2.96	
	TIME	3	561	847.72	**
	OC	1	188	1.42	
	DAY × OC	2	374	2.42	
	TIME × OC	3	561	0.52	
Cortisol awakening rise	DAY	2	340	1.84	
	OC	1	186	0.05	
	DAY × OC	2	340	1.04	
Total morning cortisol release	DAY	2	361	0.96	
	OC	1	188	0.09	
	DAY × OC	2	361	1.06	
Total diurnal cortisol release					
Mean [with t(+30)]	DAY	2	360	1.70	
	OC	1	188	0.03	
	DAY × OC	2	360	1.79	
Mean [without t(+30)]	DAY	2	360	0.55	
	OC	1	188	0.70	
	DAY × OC	2	360	1.14	
AUC [with t(+30)]	DAY	2	360	2.07	
	OC	1	188	0.25	
	DAY × OC	2	360	1.25	
AUC [without t(+30)]	DAY	2	348	0.79	
	OC	1	187	0.38	
	DAY × OC	2	348	0.96	
Diurnal cortisol decline					
Slope [without t(+0)]	DAY	2	360	2.16	
	OC	1	188	0.16	
	DAY × OC	2	360	1.30	
Slope [without t(+30)]	DAY	2	360	0.08	
	OC	1	188	1.79	
	DAY × OC	2	360	0.15	
Delta [t(+30) – t(20:00)]	DAY	2	313	1.30	
	OC	1	185	0.05	
	DAY × OC	2	313	1.04	
Delta [t(+0) – t(20:00)]	DAY	2	323	0.29	
	OC	1	186	1.30	
	DAY × OC	2	323	0.47	

NDF= numerator degrees of freedom; DDF= denominator degrees of freedom; DAY= sampling day; OC= intake of oral contraceptives; TIME= sampling time (t(+0) to t(20:00)); mixed models for repeated measures:

*p<0.05; ** p<0.01

Table 29: Effect of age and gender on cortisol levels

Dependent variable	Age × Gender: F-value (NDF, DDF)	
	Study 1	Study 2
Single samples [t(+0) to t(20:00)]	0.50 (1, 98)	1.18 (1, 324)
Cortisol awakening rise	0.25 (1, 98)	0.09 (1, 320)
Total morning cortisol release	1.30 (1, 98)	0.05 (1, 323)
Total diurnal cortisol release		
Mean [with t(+30)]	1.57 (1, 98)	0.08 (1, 322)
Mean [without t(+30)]	2.10 (1, 94)	0.23 (1, 322)
AUC [with t(+30)]	0.37 (1, 94)	0.78 (1, 322)
AUC [without t(+30)]	0.98 (1, 94)	0.39 (1, 321)
Diurnal cortisol decline		
Slope [without t(+0)]	1.10 (1, 94)	0.00 (1, 322)
Slope [without t(+30)]	3.15 (1, 94)	0.07 (1, 322)
Delta [t(+30) – t(20:00)]	2.65 (1, 92)	0.04 (1, 319)
Delta [t(+0) – t(20:00)]	5.27 (1, 93)*	0.01 (1, 319)

NDF= numerator degrees of freedom; DDF= denominator degrees of freedom; mixed models for repeated measures: *p<0.05; ** p<0.01

Table 30: Descriptive statistics of cortisol levels in nurses

	Day 1		Day 2		Day 3	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1						
t(+0)	47	9.46 \pm 7.52	48	9.59 \pm 7.31	--	--
t(+30)	45	18.66 \pm 14.79	48	16.35 \pm 11.92	--	--
t(08:00)	42	9.64 \pm 6.87	45	9.02 \pm 8.80	--	--
t(11:00)	42	5.84 \pm 3.91	44	5.89 \pm 4.25	--	--
t(15:00)	46	4.54 \pm 3.92	44	4.52 \pm 4.22	--	--
t(20:00)	43	2.46 \pm 2.45	40	2.24 \pm 1.96	--	--
Cortisol awakening rise	45	9.14 \pm 12.80	47	7.05 \pm 10.42	--	--
Total morning cortisol release	47	13.84 \pm 9.76	49	12.91 \pm 8.33	--	--
Total diurnal cortisol release						
Mean [with t(+30)]	42	8.31 \pm 4.33	44	7.78 \pm 4.76	--	--
Mean [without t(+30)]	42	6.46 \pm 3.37	44	6.07 \pm 3.76	--	--
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	40	14.70 \pm 13.47	40	13.07 \pm 10.77	--	--
Delta [t(+0) – t(20:00)]	42	6.42 \pm 7.44	39	7.54 \pm 7.52	--	--
Study 2						
t(+0)	77	13.80 \pm 8.93	78	15.73 \pm 10.93	76	17.23 \pm 12.92
t(+30)	79	29.03 \pm 19.83	78	27.99 \pm 16.39	75	29.81 \pm 20.79
t(16:00)	77	6.66 \pm 8.22	81	5.85 \pm 4.75	80	6.62 \pm 6.06
t(20:00)	79	2.51 \pm 1.90	76	2.63 \pm 2.87	75	3.78 \pm 5.73
Cortisol awakening rise	76	15.14 \pm 18.41	75	12.52 \pm 16.15	72	13.27 \pm 18.04
Total morning cortisol release	77	21.27 \pm 12.39	78	21.83 \pm 11.65	76	23.61 \pm 15.21
Total diurnal cortisol release						
Mean [with t(+30)]	77	13.08 \pm 6.93	79	13.04 \pm 6.48	79	14.01 \pm 8.80
Mean [without t(+30)]	77	7.75 \pm 4.52	79	8.29 \pm 4.98	79	9.18 \pm 6.33
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	77	26.72 \pm 19.51	73	25.62 \pm 16.35	70	25.75 \pm 19.39
Delta [t(+0) – t(20:00)]	77	11.39 \pm 9.26	73	13.05 \pm 10.16	71	13.47 \pm 11.53

Values are nmol/l

Table 31: Descriptive statistics of cortisol levels in teachers

	Day 1		Day 2		Day 3	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1						
t(+0)	21	19.01 \pm 9.11	21	19.09 \pm 9.20	--	--
t(+30)	21	33.14 \pm 16.78	21	37.39 \pm 14.55	--	--
t(08:00)	21	15.82 \pm 10.19	19	14.45 \pm 7.92	--	--
t(11:00)	21	8.16 \pm 3.20	20	7.41 \pm 3.43	--	--
t(15:00)	20	5.86 \pm 2.61	19	6.81 \pm 3.85	--	--
t(20:00)	21	2.32 \pm 1.86	19	2.34 \pm 1.99	--	--
Cortisol awakening rise	21	14.13 \pm 17.61	21	18.30 \pm 17.98	--	--
Total morning cortisol release	21	26.07 \pm 10.23	21	28.24 \pm 8.21	--	--
Total diurnal cortisol release						
Mean [with t(+30)]	21	14.09 \pm 5.01	19	15.26 \pm 4.80	--	--
Mean [without t(+30)]	21	10.26 \pm 3.83	19	10.38 \pm 4.45	--	--
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	21	30.81 \pm 17.12	19	35.33 \pm 14.69	--	--
Delta [t(+0) – t(20:00)]	21	16.69 \pm 9.41	19	16.24 \pm 8.28	--	--
Study 2						
t(+0)	105	16.16 \pm 11.92	105	15.48 \pm 10.80	105	14.90 \pm 9.95
t(+30)	102	24.78 \pm 14.71	104	23.61 \pm 13.37	103	22.95 \pm 15.91
t(16:00)	104	5.66 \pm 4.79	104	4.57 \pm 3.47	100	5.08 \pm 5.58
t(20:00)	100	1.93 \pm 2.43	94	2.26 \pm 2.00	100	2.54 \pm 4.29
Cortisol awakening rise	100	8.89 \pm 13.64	103	8.02 \pm 15.53	101	8.00 \pm 16.22
Total morning cortisol release	105	20.33 \pm 11.54	105	19.41 \pm 9.47	105	18.75 \pm 10.64
Total diurnal cortisol release						
Mean [with t(+30)]	106	12.10 \pm 6.19	103	11.81 \pm 5.67	104	11.45 \pm 6.32
Mean [without t(+30)]	106	8.03 \pm 4.75	103	7.68 \pm 4.40	104	7.64 \pm 4.94
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	94	23.41 \pm 14.65	91	21.17 \pm 11.51	97	20.83 \pm 16.94
Delta [t(+0) – t(20:00)]	98	14.77 \pm 11.85	91	13.87 \pm 11.41	98	12.45 \pm 9.76

Values are nmol/l

Table 32: Descriptive statistics of cortisol levels in hotel staff

	Day 1		Day 2		Day 3	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1						
t(+0)	7	11.34 \pm 7.28	7	17.57 \pm 10.34	--	--
t(+30)	7	16.51 \pm 10.37	8	25.89 \pm 11.82	--	--
t(08:00)	6	10.52 \pm 7.32	7	14.93 \pm 12.75	--	--
t(11:00)	8	8.94 \pm 5.82	7	6.69 \pm 4.71	--	--
t(15:00)	8	4.95 \pm 5.82	6	2.55 \pm 1.91	--	--
t(20:00)	7	0.87 \pm 0.57	6	2.57 \pm 3.46	--	--
Cortisol awakening rise	7	5.17 \pm 8.09	7	8.43 \pm 12.04	--	--
Total morning cortisol release	7	13.93 \pm 7.99	8	22.20 \pm 9.27	--	--
Total diurnal cortisol release						
Mean [with t(+30)]	7	8.94 \pm 3.81	7	12.72 \pm 4.41	--	--
Mean [without t(+30)]	7	7.30 \pm 3.70	7	9.47 \pm 3.06	--	--
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	6	17.18 \pm 10.59	6	24.48 \pm 13.66	--	--
Delta [t(+0) – t(20:00)]	6	11.62 \pm 7.40	5	18.58 \pm 9.97	--	--
Study 2						
t(+0)	17	13.67 \pm 7.42	17	12.90 \pm 8.77	16	13.95 \pm 11.10
t(+30)	17	25.02 \pm 13.88	17	19.99 \pm 10.48	17	16.83 \pm 10.29
t(16:00)	17	5.96 \pm 3.56	17	7.25 \pm 9.04	16	6.39 \pm 5.05
t(20:00)	17	3.64 \pm 2.73	17	5.23 \pm 6.81	17	4.22 \pm 5.26
Cortisol awakening rise	17	11.35 \pm 11.34	17	7.09 \pm 9.15	16	1.85 \pm 13.29
Total morning cortisol release	17	19.35 \pm 9.58	17	16.20 \pm 8.68	16	14.88 \pm 8.04
Total diurnal cortisol release						
Mean [with t(+30)]	17	12.07 \pm 4.32	17	11.20 \pm 5.79	17	9.94 \pm 4.72
Mean [without t(+30)]	17	7.76 \pm 2.46	17	8.46 \pm 5.45	17	8.04 \pm 5.09
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	17	21.83 \pm 14.80	17	14.76 \pm 11.92	17	12.61 \pm 12.24
Delta [t(+0) – t(20:00)]	17	10.03 \pm 8.77	17	7.67 \pm 12.40	16	9.81 \pm 11.56

Values are nmol/l

Table 33: Descriptive statistics of cortisol levels in social service assistants

	Day 1		Day 2		Day 3	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1						
t(+0)	22	17.45 \pm 8.49	23	17.93 \pm 7.01	--	--
t(+30)	22	32.92 \pm 9.19	22	28.11 \pm 10.51	--	--
t(08:00)	22	15.58 \pm 9.32	22	12.49 \pm 5.01	--	--
t(11:00)	22	7.01 \pm 3.71	22	6.76 \pm 3.72	--	--
t(15:00)	21	7.02 \pm 3.54	22	6.37 \pm 3.41	--	--
t(20:00)	21	3.15 \pm 2.27	22	3.37 \pm 2.41	--	--
Cortisol awakening rise	22	15.47 \pm 12.34	22	9.82 \pm 11.62	--	--
Total morning cortisol release	22	25.19 \pm 6.35	22	22.62 \pm 7.16	--	--
Total diurnal cortisol release						
Mean [with t(+30)]	22	13.97 \pm 2.85	22	12.35 \pm 3.23	--	--
Mean [without t(+30)]	22	10.09 \pm 2.68	22	9.52 \pm 2.47	--	--
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	21	30.21 \pm 8.44	21	23.59 \pm 9.11	--	--
Delta [t(+0) – t(20:00)]	21	14.47 \pm 8.86	22	14.60 \pm 7.62	--	--
Study 2						
t(+0)	84	17.41 \pm 9.93	89	17.60 \pm 9.49	89	17.91 \pm 10.02
t(+30)	86	24.94 \pm 15.29	83	25.36 \pm 13.50	85	25.05 \pm 13.59
t(16:00)	87	5.23 \pm 3.59	87	5.47 \pm 4.85	86	5.60 \pm 4.46
t(20:00)	83	2.26 \pm 1.97	84	2.67 \pm 4.14	86	3.08 \pm 3.46
Cortisol awakening rise	82	7.20 \pm 17.13	83	7.46 \pm 14.77	85	6.85 \pm 14.35
Total morning cortisol release	84	20.84 \pm 9.83	89	21.03 \pm 9.18	89	21.19 \pm 9.61
Total diurnal cortisol release						
Mean [with t(+30)]	88	12.23 \pm 5.47	87	12.81 \pm 5.84	89	12.84 \pm 5.63
Mean [without t(+30)]	88	8.34 \pm 4.00	87	8.83 \pm 4.52	89	8.96 \pm 4.15
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	80	22.28 \pm 14.89	79	22.13 \pm 13.26	82	21.76 \pm 12.82
Delta [t(+0) – t(20:00)]	76	15.03 \pm 9.84	84	14.82 \pm 9.60	86	15.02 \pm 10.59

Values are nmol/l

Table 34: Descriptive statistics of cortisol levels in mixed group (occupation)

	Day 1		Day 2		Day 3	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 2						
t(+0)	33	14.17 \pm 8.66	32	16.76 \pm 9.59	33	15.26 \pm 6.91
t(+30)	33	21.02 \pm 14.21	34	22.80 \pm 12.93	34	22.94 \pm 12.04
t(16:00)	33	7.64 \pm 8.31	35	6.29 \pm 5.71	33	6.26 \pm 4.32
t(20:00)	30	2.94 \pm 2.42	34	3.09 \pm 2.76	33	4.35 \pm 5.85
Cortisol awakening rise	32	6.92 \pm 10.40	32	6.01 \pm 13.74	33	7.82 \pm 11.23
Total morning cortisol release	33	17.52 \pm 10.66	32	19.77 \pm 9.37	33	19.17 \pm 8.17
Total diurnal cortisol release						
Mean [with t(+30)]	32	11.77 \pm 5.18	34	11.87 \pm 4.87	33	12.03 \pm 4.47
Mean [without t(+30)]	32	8.53 \pm 3.66	34	8.59 \pm 3.67	33	8.51 \pm 3.05
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	29	19.19 \pm 15.27	33	19.84 \pm 13.83	32	18.53 \pm 13.04
Delta [t(+0) – t(20:00)]	28	12.27 \pm 9.78	31	13.71 \pm 10.58	31	10.67 \pm 8.59

Values are nmol/l

Table 35: Effect of occupational group on cortisol single samples in study 1 – single contrasts

Contrasts	t value	P	Contrasts	t value	P
Study 1					
Cortisol levels at t(+0)			Cortisol levels at t(+30)		
Nurses vs. teachers	-6.52	**	Nurses vs. teachers	-6.92	**
Nurses vs. hotel staff	-2.81	**	Nurses vs. hotel staff	-1.70	
Nurses vs. social service	-5.99	**	Nurses vs. social service	-6.08	**
Teachers vs. hotel staff	1.47		Teachers vs. hotel staff	2.82	**
Teachers vs. social service	0.59		Teachers vs. social service	0.84	
Hotel staff vs. social service	-1.05		Hotel staff vs. social service	-2.22	*
Cortisol levels at t(08:00)			Cortisol levels at t(11:00)		
Nurses vs. teachers	-4.24	**	Nurses vs. teachers	-2.87	**
Nurses vs. hotel staff	-0.87		Nurses vs. hotel staff	-1.29	
Nurses vs. social service	-3.50	**	Nurses vs. social service	-1.83	
Teachers vs. hotel staff	1.82		Teachers vs. hotel staff	0.63	
Teachers vs. social service	0.74		Teachers vs. social service	0.94	
Hotel staff vs. social service	-1.30		Hotel staff vs. social service	0.06	
Cortisol levels at t(15:00)			Cortisol levels at t(20:00)		
Nurses vs. teachers	-3.08	**	Nurses vs. teachers	-0.30	
Nurses vs. hotel staff	1.41		Nurses vs. hotel staff	1.57	
Nurses vs. social service	-3.78	**	Nurses vs. social service	-2.05	*
Teachers vs. hotel staff	3.22	**	Teachers vs. hotel staff	1.64	
Teachers vs. social service	-0.50		Teachers vs. social service	-1.48	
Hotel staff vs. social service	-3.63	**	Hotel staff vs. social service	-2.71	**

*p<0.05; ** p<0.01

Table 36: Effect of occupational group on cortisol parameters in study 1 – single contrasts

Contrasts	F value	P	Contrasts	F value	P
Study 1					
Cortisol awakening rise			Total morning cortisol release		
Nurses vs. teachers	7.19	**	Nurses vs. teachers	45.95	**
Nurses vs. hotel staff	0.05		Nurses vs. hotel staff	3.83	
Nurses vs. social service	2.90		Nurses vs. social service	36.03	**
Teachers vs. hotel staff	3.51		Teachers vs. hotel staff	6.59	*
Teachers vs. social service	0.77		Teachers vs. social service	0.67	
Hotel staff vs. social service	1.56		Hotel staff vs. social service	3.92	
Diurnal mean with t(+30)			Diurnal mean without t(+30)		
Nurses vs. teachers	40.51	**	Nurses vs. teachers	27.29	**
Nurses vs. hotel staff	6.04	*	Nurses vs. hotel staff	5.87	*
Nurses vs. social service	31.88	**	Nurses vs. social service	25.16	**
Teachers vs. hotel staff	3.05		Teachers vs. hotel staff	1.11	
Teachers vs. social service	0.61		Teachers vs. social service	0.10	
Hotel staff vs. social service	1.43		Hotel staff vs. social service	0.70	
AUC with t(+30)			AUC without t(+30)		
Nurses vs. teachers	16.94	**	Nurses vs. teachers	17.71	**
Nurses vs. hotel staff	0.27		Nurses vs. hotel staff	1.23	
Nurses vs. social service	15.85	**	Nurses vs. social service	15.71	**
Teachers vs. hotel staff	4.44	*	Teachers vs. hotel staff	2.64	
Teachers vs. social service	0.05		Teachers vs. social service	0.10	
Hotel staff vs. social service	3.88		Hotel staff vs. social service	1.99	
Linear slope including t(+30)			Linear slope excluding t(+30)		
Nurses vs. teachers	33.17	**	Nurses vs. teachers	25.61	**
Nurses vs. hotel staff	0.48		Nurses vs. hotel staff	2.46	
Nurses vs. social service	13.28	**	Nurses vs. social service	13.97	**
Teachers vs. hotel staff	8.84	**	Teachers vs. hotel staff	2.96	
Teachers vs. social service	3.80		Teachers vs. social service	1.59	
Hotel staff vs. social service	2.54		Hotel staff vs. social service	0.68	
Delta [t(+30) – t(20:00)]			Delta [t(+0) – t(20:00)]		
Nurses vs. teachers	43.15	**	Nurses vs. teachers	29.46	**
Nurses vs. hotel staff	2.88		Nurses vs. hotel staff	7.84	**
Nurses vs. social service	21.96	**	Nurses vs. social service	18.22	**
Teachers vs. hotel staff	5.52	*	Teachers vs. hotel staff	0.31	
Teachers vs. social service	3.07		Teachers vs. social service	1.25	
Hotel staff vs. social service	1.35		Hotel staff vs. social service	0.04	

*p<0.05; ** p<0.01

Table 37: Effect of occupational group on cortisol single samples in study 2 – single contrasts

Contrasts	t value	P	Contrasts	t value	P
Study 2					
Cortisol levels at t(+0)			Cortisol levels at t(+30)		
Nurses vs. teachers	-0.46		Nurses vs. teachers	2.44	*
Nurses vs. hotel staff	0.92		Nurses vs. hotel staff	2.03	*
Nurses vs. social service	-2.67	**	Nurses vs. social service	1.24	
Nurses vs. mixed group	-0.79		Nurses vs. mixed group	2.43	*
Teachers vs. hotel staff	1.21		Teachers vs. hotel staff	0.69	
Teachers vs. social service	-2.40	*	Teachers vs. social service	-1.17	
Teachers vs. mixed group	-0.47		Teachers vs. mixed group	0.68	
Hotel staff vs. social service	-2.49	*	Hotel staff vs. social service	-1.32	
Hotel staff vs. mixed group	-1.37		Hotel staff vs. mixed group	-0.15	
Social service vs. mixed g.	1.24		Social service vs. mixed g.	1.51	
Cortisol levels at t(16:00)			Cortisol levels at t(20:00)		
Nurses vs. teachers	1.85		Nurses vs. teachers	2.84	**
Nurses vs. hotel staff	-0.71		Nurses vs. hotel staff	-2.13	*
Nurses vs. social service	0.45		Nurses vs. social service	1.03	
Nurses vs. mixed group	-1.14		Nurses vs. mixed group	-1.43	
Teachers vs. hotel staff	-1.77		Teachers vs. hotel staff	-3.80	**
Teachers vs. social service	-1.42		Teachers vs. social service	-1.82	
Teachers vs. mixed group	-2.58	*	Teachers vs. mixed group	-3.61	**
Hotel staff vs. social service	0.98		Hotel staff vs. social service	2.75	**
Hotel staff vs. mixed group	-0.14		Hotel staff vs. mixed group	0.92	
Social service vs. mixed g.	-1.50		Social service vs. mixed g.	-2.23	*

*p<0.05; ** p<0.01

Table 38: Effect of occupational group on cortisol parameters in study 2 – single contrasts

Contrasts	F value	P	Contrasts	F value	P
Study 2					
Cortisol awakening rise			AUC with t(+30)		
Nurses vs. teachers	8.29	**	Nurses vs. teachers	9.80	**
Nurses vs. hotel staff	3.89	*	Nurses vs. hotel staff	0.94	
Nurses vs. social service	11.69	**	Nurses vs. social service	2.56	
Nurses vs. mixed group	6.28	*	Nurses vs. mixed group	0.02	
Teachers vs. hotel staff	0.14		Teachers vs. hotel staff	0.62	
Teachers vs. social service	0.51		Teachers vs. social service	2.28	
Teachers vs. mixed group	0.19		Teachers vs. mixed group	4.83	*
Hotel staff vs. social service	0.00		Hotel staff vs. social service	0.00	
Hotel staff vs. mixed group	0.00		Hotel staff vs. mixed group	0.60	
Social service vs. mixed g.	0.01		Social service vs. mixed g.	1.16	
Delta [t(+30) – t(20:00)]			Delta [t(+0) – t(20:00)]		
Nurses vs. teachers	5.00	*	Nurses vs. teachers	0.74	
Nurses vs. hotel staff	9.10	**	Nurses vs. hotel staff	2.93	
Nurses vs. social service	3.53		Nurses vs. social service	3.90	*
Nurses vs. mixed group	7.19	**	Nurses vs. mixed group	0.02	
Teachers vs. hotel staff	3.20		Teachers vs. hotel staff	5.02	*
Teachers vs. social service	0.09		Teachers vs. social service	1.51	
Teachers vs. mixed group	1.20		Teachers vs. mixed group	0.62	
Hotel staff vs. social service	3.72		Hotel staff vs. social service	8.35	**
Hotel staff vs. mixed group	0.69		Hotel staff vs. mixed group	2.03	
Social service vs. mixed g.	1.65		Social service vs. mixed g.	2.67	

*p<0.05; ** p<0.01

Table 39: Descriptive statistics of cortisol levels in participants without shift work

	Day 1		Day 2		Day 3	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1						
t(+0)	42	9.84 \pm 7.65	42	10.24 \pm 7.01	--	--
t(+30)	41	18.36 \pm 13.31	42	17.89 \pm 11.10	--	--
t(08:00)	40	10.22 \pm 6.99	43	9.51 \pm 9.30	--	--
t(11:00)	37	5.99 \pm 4.24	38	6.06 \pm 4.33	--	--
t(15:00)	40	4.75 \pm 4.13	38	4.85 \pm 4.49	--	--
t(20:00)	38	2.36 \pm 2.31	39	2.29 \pm 2.21	--	--
Cortisol awakening rise	41	8.53 \pm 13.01	41	7.55 \pm 9.84	--	--
Total morning cortisol release	42	14.00 \pm 8.65	43	14.18 \pm 7.95	--	--
Total diurnal cortisol release						
Mean [with t(+30)]	39	8.59 \pm 4.27	40	8.48 \pm 4.62	--	--
Mean [without t(+30)]	39	6.68 \pm 3.28	40	6.44 \pm 3.63	--	--
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	37	15.70 \pm 13.63	39	14.95 \pm 10.58	--	--
Delta [t(+0) – t(20:00)]	38	7.32 \pm 7.83	38	7.74 \pm 6.92	--	--
Study 2						
t(+0)	232	16.21 \pm 10.59	233	16.32 \pm 9.77	234	15.88 \pm 9.37
t(+30)	230	24.26 \pm 14.85	228	24.13 \pm 13.42	229	23.67 \pm 15.02
t(16:00)	232	5.74 \pm 5.42	233	5.18 \pm 4.47	225	5.55 \pm 5.03
t(20:00)	221	2.16 \pm 2.24	221	2.65 \pm 3.28	226	3.03 \pm 4.27
Cortisol awakening rise	224	8.08 \pm 14.57	225	7.77 \pm 14.86	226	7.68 \pm 15.07
Total morning cortisol release	232	20.03 \pm 10.71	233	20.04 \pm 9.24	234	19.59 \pm 10.10
Total diurnal cortisol release						
Mean [with t(+30)]	235	12.09 \pm 5.72	232	12.17 \pm 5.64	233	12.02 \pm 5.79
Mean [without t(+30)]	235	8.18 \pm 4.28	232	8.23 \pm 4.32	233	8.20 \pm 4.21
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	213	22.27 \pm 14.90	211	21.22 \pm 12.65	218	20.84 \pm 15.44
Delta [t(+0) – t(20:00)]	215	14.34 \pm 10.76	215	13.92 \pm 10.12	222	13.13 \pm 9.97

Values are nmol/l

Table 40: Descriptive statistics of cortisol levels in participants with shift work

	Day 1		Day 2		Day 3	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1						
t(+0)	41	15.80 \pm 8.72	43	17.78 \pm 9.99	--	--
t(+30)	40	32.17 \pm 16.46	43	29.59 \pm 15.97	--	--
t(08:00)	38	14.06 \pm 9.01	38	13.17 \pm 6.79	--	--
t(11:00)	42	7.23 \pm 3.92	42	6.45 \pm 3.66	--	--
t(15:00)	42	5.45 \pm 3.58	42	5.66 \pm 3.78	--	--
t(20:00)	40	2.19 \pm 1.89	36	2.72 \pm 2.32	--	--
Cortisol awakening rise	40	16.13 \pm 14.88	42	12.17 \pm 16.47	--	--
Total morning cortisol release	41	23.67 \pm 11.08	44	23.33 \pm 10.62	--	--
Total diurnal cortisol release						
Mean [with t(+30)]	39	12.90 \pm 4.82	40	12.75 \pm 5.25	--	--
Mean [without t(+30)]	39	9.12 \pm 3.51	40	9.41 \pm 4.04	--	--
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	37	29.87 \pm 15.12	35	27.69 \pm 15.70	--	--
Delta [t(+0) – t(20:00)]	38	13.64 \pm 8.69	35	16.43 \pm 9.44	--	--
Study 2						
t(+0)	79	13.30 \pm 8.44	82	15.46 \pm 11.38	79	17.52 \pm 13.28
t(+30)	82	28.76 \pm 19.47	82	27.11 \pm 16.12	79	28.73 \pm 19.46
t(16:00)	81	6.76 \pm 7.33	85	6.18 \pm 5.92	84	6.51 \pm 6.05
t(20:00)	83	2.80 \pm 2.04	79	2.94 \pm 3.86	80	4.00 \pm 5.92
Cortisol awakening rise	78	15.48 \pm 17.98	79	11.63 \pm 15.70	75	11.82 \pm 17.56
Total morning cortisol release	79	20.95 \pm 12.16	82	21.14 \pm 11.85	79	23.22 \pm 14.67
Total diurnal cortisol release						
Mean [with t(+30)]	80	12.86 \pm 6.66	82	12.88 \pm 6.50	83	13.71 \pm 8.63
Mean [without t(+30)]	80	7.62 \pm 4.14	82	8.37 \pm 5.23	83	9.25 \pm 6.51
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	80	26.13 \pm 19.23	77	24.35 \pm 16.61	75	24.08 \pm 18.14
Delta [t(+0) – t(20:00)]	79	10.59 \pm 8.82	76	12.48 \pm 11.62	75	13.40 \pm 12.01

Values are nmol/l

Table 41: Prevalence of self-reported disorders

	N
Study 1	
Without self-reported disorders	71 (69%)
With at least 1 self-reported disorder:	32 (31%)
endocrine	8
neurological	2
psychiatric	2
sleep disorder	8
endocrine + psychiatric	1
endocrine + sleep disorder	4
neurological + sleep disorder	3
psychiatric + sleep disorder	3
endocrine + psychiatric + sleep disorder	1
Study 2	
Without self-reported disorders	253 (75%)
With at least 1 self-reported disorder:	83 (25%)
endocrine	13
neurological	14
psychiatric	4
sleep disorder	39
endocrine + sleep disorder	4
neurological + sleep disorder	1
psychiatric + sleep disorder	3
endocrine + psychiatric + sleep disorder	1
endocrine + psychiatric + neurological	3
endocrine + psychiatric + neurological + sleep disorder	1

Table 42: Descriptive statistics of participants with self-reported disorders

	With self-reported disorders		Without self-reported disorders		Test of difference between groups	
	N (%)	Mean (SD)	N (%)	Mean (SD)	Chi ²	F
Study 1	32 (31)	--	71 (69%)	--	--	--
Age	--	40.7 (9.2)	--	40.5 (12.2)	--	0.01
Gender (M:F)	4:28	--	19:52	--	2.59	--
Occupational groups					39.76**	--
Nurses	30 (29.1)	--	19 (18.4)	--	--	--
Teachers	1 (1.0)	--	21 (20.4)	--	--	--
Hotel staff	0	--	9 (8.7)	--	--	--
Social Service	1 (1.0)	--	22 (21.4)	--	--	--
Depressive symptoms ⁺	--	58.9 (34.5)	--	55.3 (32.8)	--	0.24
Trait anxiety ⁺	--	72.6 (25.0)	--	60.3 (30.2)	--	3.80
Somatic complaints: ⁺						
Exhaustion	--	58.7 (27.0)	--	51.7 (28.0)	--	1.31
Gastrointestinal	--	62.7 (19.5)	--	54.7 (18.1)	--	3.68
Cardiovascular	--	55.2 (22.5)	--	51.5 (20.4)	--	0.64
Musculoskeletal	--	56.7 (31.4)	--	60.2 (24.0)	--	0.41
Overall distress	--	50.1 (30.7)	--	48.7 (25.3)	--	0.05
Study 2	83 (25%)	--	253 (75%)	--	--	--
Age	--	44.8 (10.3)	--	41.6 (11.1)	--	5.04 *
Gender (M:F)	22:61	--	87:166	--	1.77	--
Occupational groups					16.72 **	--
Nurses	28 (8.3)	--	56 (16.7)	--	--	--
Teachers	35 (10.4)	--	75 (22.3)	--	--	--
Hotel staff	3 (0.9)	--	14 (4.2)	--	--	--
Social Service	15 (4.5)	--	75 (22.3)	--	--	--
Mixed group	2 (0.6)	--	33 (9.8)	--	--	--
Depressive symptoms ⁺	--	60.7 (27.6)	--	46.3 (27.0)	--	16.64 **
Trait anxiety ⁺	--	74.1 (25.0)	--	57.9 (27.0)	--	22.93 **
Somatic complaints: ⁺						
Exhaustion	--	68.4 (27.0)	--	63.7 (26.0)	--	1.81
Gastrointestinal	--	60.2 (21.8)	--	60.5 (21.6)	--	0.01
Cardiovascular	--	60.6 (22.6)	--	56.1 (21.0)	--	2.41
Musculoskeletal	--	71.5 (23.5)	--	62.4 (24.8)	--	8.06 **
Overall distress	--	64.2 (26.5)	--	55.6 (26.1)	--	5.98 *

⁺ Percentile rank; depressive symptoms: percentile rank (ADS, Hautzinger & Bailer, 1995); trait anxiety: percentile rank (STAI-T; Laux et al., 1981); somatic complaints: percentile rank (GBB; Braehler & Scheer, 1995); * p<0.05; ** p<0.01.

Table 43: Descriptive statistics of cortisol levels in participants with and without self-reported disorders

	With self-reported disorders			Without self-reported disorders		
	Day 1	Day 2	Day 3	Day 1	Day 2	Day 3
Study 1						
t(+0)	10.00 ± 7.12	8.96 ± 6.17	--	15.19 ± 9.45	16.56 ± 9.05	--
t(+30)	20.36 ± 17.08	17.21 ± 13.33	--	27.15 ± 14.44	27.39 ± 14.27	--
t(08:00)	10.85 ± 7.44	9.57 ± 10.36	--	13.32 ± 9.24	12.27 ± 7.32	--
t(11:00)	6.50 ± 4.24	6.25 ± 4.43	--	7.10 ± 3.90	6.61 ± 3.81	--
t(15:00)	4.68 ± 3.95	4.47 ± 4.52	--	5.72 ± 3.82	5.72 ± 3.70	--
t(20:00)	2.45 ± 2.29	2.11 ± 2.16	--	2.47 ± 2.23	2.79 ± 2.23	--
Study 2						
t(+0)	15.92 ± 11.18	17.61 ± 12.48	15.75 ± 10.67	15.39 ± 9.94	15.63 ± 9.42	16.40 ± 10.61
t(+30)	28.91 ± 19.82	24.77 ± 13.30	22.96 ± 15.13	24.41 ± 14.81	24.80 ± 14.48	25.36 ± 16.72
t(16:00)	6.95 ± 7.21	4.97 ± 3.72	5.01 ± 3.34	5.69 ± 5.43	5.60 ± 5.20	6.02 ± 5.77
t(20:00)	2.80 ± 2.84	2.59 ± 2.62	3.39 ± 5.76	2.19 ± 1.96	2.75 ± 3.65	3.20 ± 4.32

Values are nmol/l; mean ± SD

Table 44: Association of somatic complaints and cortisol levels

	Somatic complaints							
	Day 1+2		Day 1		Day 2		Day 3	
	N	r ⁺	N	r	N	r	N	r
Study 1								
t(+0)	182	.01	90	.03	92	-.01	--	--
t(+30)	180	-.02	88	-.06	92	.01	--	--
t(08:00)	171	.02	84	.03	87	.00	--	--
t(11:00)	174	-.05	87	-.02	87	-.09	--	--
t(15:00)	174	-.10	89	-.12	85	-.08	--	--
t(20:00)	166	.01	85	-.06	81	.09	--	--
Cortisol awakening rise	178	-.03	88	-.07	90	.01	--	--
Total morning cortisol release	184	-.02	90	-.05	94	.01	--	--
Total diurnal cortisol release								
Mean [with t(+30)]	172	-.05	86	-.08	86	-.02	--	--
Mean [without t(+30)]	172	-.04	86	-.05	86	-.03	--	--
AUC [with t(+30)]	172	-.10	86	-.16	86	-.02	--	--
AUC [without t(+30)]	172	-.08	86	-.12	86	-.05	--	--
Diurnal cortisol decline								
Slope [without t(+0)]	172	.04	86	.06	86	.01	--	--
Slope [without t(+30)]	172	-.02	86	-.05	86	.02	--	--
Delta [t(+30) – t(20:00)]	161	-.04	81	-.04	80	-.03	--	--
Delta [t(+0) – t(20:00)]	162	.03	83	.04	79	.02	--	--
	Day 1+2+3		Day 1		Day 2		Day 3	
	N	r ⁺	N	r	N	r	N	r
Study 2								
t(+0)	838	.01	278	.01	280	.00	280	.02
t(+30)	830	-.06	278	-.06	277	-.03	275	-.09
t(16:00)	841	-.03	279	-.01	284	-.03	278	-.05
t(20:00)	813	-.10**	272	-.11	267	-.09	274	-.09
Cortisol awakening rise	810	-.08*	207	-.09	271	-.02	269	-.12
Total morning cortisol release	838	-.06	278	-.06	280	-.03	280	-.08
Total diurnal cortisol release								
Mean [with t(+30)]	844	-.03	281	-.04	280	-.05	283	-.01
Mean [without t(+30)]	844	-.01	281	-.01	280	-.06	283	.03
AUC [with t(+30)]	844	-.06	281	-.10	280	-.02	283	-.04
AUC [without t(+30)]	826	.01	273	.05	277	-.04	276	.02
Diurnal cortisol decline								
Slope [without t(+0)]	844	.05	281	.06	280	.02	283	.06
Slope [without t(+30)]	844	-.04	281	-.06	280	.01	283	-.06
Delta [t(+30) – t(20:00)]	780	-.05	262	-.05	256	-.01	262	-.09
Delta [t(+0) – t(20:00)]	787	.05	263	.07	258	.01	266	.06

*Pearson correlation coefficients; * p< 0.05; ** p< 0.01 ; somatic complaints : overall somatic distress, percentile rank (GBBB ; Braehler & Scheer, 1995).

Table 45: Effect of somatic complaints on cortisol levels in study 1

Dependent variable	Effect	NDF	DDF	F	p
Study 1					
Single samples: t(+0), t(+30), t(08:00), t(11:00), t(15:00), t(20:00)	DAY	1	91	0.07	
	TIME	5	455	82.00	**
	GBBB	1	93	0.01	
	DAY × GBBB	1	930	0.08	
	TIME × GBBB	5	930	0.65	
Cortisol awakening rise	DAY	1	81	0.80	
	GBBB	1	93	0.10	
	DAY × GBBB	1	81	0.34	
Total morning cortisol release	DAY	1	87	0.00	
	GBBB	1	93	0.03	
	DAY × GBBB	1	87	0.09	
Total diurnal cortisol release					
Mean [with t(+30)]	DAY	1	79	0.67	
	GBBB	1	89	0.04	
	DAY × GBBB	1	79	0.34	
Mean [without t(+30)]	DAY	1	79	0.15	
	GBBB	1	89	0.01	
	DAY × GBBB	1	79	0.01	
AUC [with t(+30)]	DAY	1	79	7.62	**
	GBBB	1	89	0.86	
	DAY × GBBB	1	79	2.78	
AUC [without t(+30)]	DAY	1	79	1.23	
	GBBB	1	89	0.58	
	DAY × GBBB	1	79	0.56	
Diurnal cortisol decline					
Slope [without t(+0)]	DAY	1	79	0.08	
	GBBB	1	89	0.18	
	DAY × GBBB	1	79	0.00	
Slope [without t(+30)]	DAY	1	79	1.83	
	GBBB	1	89	0.00	
	DAY × GBBB	1	79	2.22	
Delta [t(+30) – t(20:00)]	DAY	1	70	0.02	
	GBBB	1	87	0.04	
	DAY × GBBB	1	70	0.02	
Delta [t(+0) – t(20:00)]	DAY	1	70	0.85	
	GBBB	1	88	0.14	
	DAY × GBBB	1	70	0.25	

NDF= numerator degrees of freedom; DDF= denominator degrees of freedom; DAY= sampling day; GBBB= somatic complaints, overall distress (GBBB; percentile rank; Braehler & Scheer, 1995); TIME= sampling time (t(+0) to t(20:00)); mixed models for repeated measures: *p<0.05; ** p<0.01

Table 46: Effect of somatic complaints on cortisol levels in study 2

Dependent variable	Effect	NDF	DDF	F	p
Study 2					
Single samples: t(+0), t(+30), t(16:00), t(20:00)	DAY	2	576	0.61	
	TIME	3	863	275.73	**
	GBBB	1	288	2.37	
	DAY × GBBB	2	3010	0.13	
	TIME × GBBB	3	3010	1.98	
Cortisol awakening rise	DAY	2	520	1.48	
	GBBB	1	284	3.04	
	DAY × GBBB	2	520	1.03	
Total morning cortisol release	DAY	2	545	0.10	
	GBBB	1	287	1.13	
	DAY × GBBB	2	545	0.24	
Total diurnal cortisol release					
Mean [with t(+30)]	DAY	2	552	0.10	
	GBBB	1	286	0.40	
	DAY × GBBB	2	552	0.10	
Mean [without t(+30)]	DAY	2	552	0.72	
	GBBB	1	286	0.09	
	DAY × GBBB	2	552	0.77	
AUC [with t(+30)]	DAY	2	552	0.47	
	GBBB	1	286	2.00	
	DAY × GBBB	2	552	0.47	
AUC [without t(+30)]	DAY	2	535	0.76	
	GBBB	1	285	0.08	
	DAY × GBBB	2	535	0.70	
Diurnal cortisol decline					
Slope [without t(+0)]	DAY	2	552	0.49	
	GBBB	1	286	1.03	
	DAY × GBBB	2	552	0.25	
Slope [without t(+30)]	DAY	2	552	0.66	
	GBBB	1	286	0.64	
	DAY × GBBB	2	552	0.60	
Delta [t(+30) – t(20:00)]	DAY	2	490	1.01	
	GBBB	1	284	1.04	
	DAY × GBBB	2	490	0.92	
Delta [t(+0) – t(20:00)]	DAY	2	497	0.57	
	GBBB	1	284	1.17	
	DAY × GBBB	2	497	0.49	

NDF= numerator degrees of freedom; DDF= denominator degrees of freedom; DAY= sampling day; GBBB= somatic complaints, overall distress (GBBB; percentile rank; Braehler & Scheer, 1995); TIME= sampling time (t(+0) to t(20:00)); mixed models for repeated measures: *p<0.05; ** p<0.01

Table 47: Descriptive statistics of cortisol levels in non-smokers

	Day 1		Day 2		Day 3	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1						
t(+0)	59	15.75 \pm 9.25	59	16.28 \pm 9.10	--	--
t(+30)	57	26.27 \pm 15.36	59	25.79 \pm 15.10	--	--
t(08:00)	57	13.64 \pm 8.89	56	10.73 \pm 6.82	--	--
t(11:00)	59	7.36 \pm 4.00	57	6.25 \pm 3.37	--	--
t(15:00)	60	5.38 \pm 3.16	56	5.16 \pm 3.11	--	--
t(20:00)	56	2.42 \pm 2.10	54	2.39 \pm 2.14	--	--
Cortisol awakening rise	57	10.26 \pm 14.66	58	9.42 \pm 14.76	--	--
Total morning cortisol release	59	20.70 \pm 10.47	60	20.98 \pm 10.11	--	--
Total diurnal cortisol release						
Mean [with t(+30)]	57	12.05 \pm 4.98	56	11.30 \pm 5.13	--	--
Mean [without t(+30)]	57	9.19 \pm 3.72	56	8.29 \pm 3.86	--	--
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	53	24.66 \pm 15.36	53	24.10 \pm 14.91	--	--
Delta [t(+0) – t(20:00)]	55	13.70 \pm 9.28	53	14.08 \pm 8.55	--	--
Study 2						
t(+0)	211	15.80 \pm 9.84	209	16.06 \pm 9.43	208	16.36 \pm 9.81
t(+30)	208	24.67 \pm 15.42	205	24.72 \pm 13.97	203	25.11 \pm 15.55
t(16:00)	208	5.46 \pm 5.34	209	4.99 \pm 4.20	203	5.35 \pm 4.52
t(20:00)	205	2.07 \pm 2.15	197	2.39 \pm 2.42	201	2.66 \pm 3.72
Cortisol awakening rise	204	8.65 \pm 14.79	200	8.45 \pm 14.92	199	8.53 \pm 15.13
Total morning cortisol release	211	19.93 \pm 10.70	209	20.08 \pm 9.49	208	20.42 \pm 10.64
Total diurnal cortisol release						
Mean [with t(+30)]	212	11.95 \pm 5.70	207	12.10 \pm 5.50	209	12.19 \pm 5.89
Mean [without t(+30)]	212	7.86 \pm 3.99	207	7.97 \pm 3.80	209	8.16 \pm 4.22
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	197	22.57 \pm 15.28	189	22.13 \pm 12.99	192	22.74 \pm 16.18
Delta [t(+0) – t(20:00)]	201	13.94 \pm 9.72	191	14.04 \pm 9.71	196	13.88 \pm 10.07

Values are nmol/l

Table 48: Descriptive statistics of cortisol levels in current smokers

	Day 1		Day 2		Day 3	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1						
t(+0)	35	10.21 \pm 7.76	37	10.88 \pm 7.92	--	--
t(+30)	35	23.25 \pm 16.13	38	21.49 \pm 13.30	--	--
t(08:00)	32	10.19 \pm 7.04	36	11.73 \pm 9.77	--	--
t(11:00)	31	5.90 \pm 3.67	33	6.92 \pm 4.65	--	--
t(15:00)	33	5.15 \pm 4.40	32	5.17 \pm 4.37	--	--
t(20:00)	33	2.45 \pm 2.42	32	2.93 \pm 2.34	--	--
Cortisol awakening rise	35	13.03 \pm 12.82	37	11.02 \pm 10.50	--	--
Total morning cortisol release	35	16.73 \pm 10.91	38	16.13 \pm 9.57	--	--
Total diurnal cortisol release						
Mean [with t(+30)]	32	9.21 \pm 4.60	35	10.21 \pm 5.55	--	--
Mean [without t(+30)]	32	6.58 \pm 3.10	35	7.83 \pm 4.28	--	--
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	32	19.12 \pm 15.02	32	17.28 \pm 12.57	--	--
Delta [t(+0) – t(20:00)]	32	7.18 \pm 8.02	31	8.64 \pm 8.19	--	--
Study 2						
t(+0)	87	13.95 \pm 9.42	92	15.67 \pm 9.79	92	16.69 \pm 12.47
t(+30)	91	27.41 \pm 18.76	91	24.45 \pm 14.53	91	24.40 \pm 17.75
t(16:00)	91	6.67 \pm 6.96	95	6.04 \pm 6.16	92	6.43 \pm 5.58
t(20:00)	85	2.78 \pm 2.09	89	3.25 \pm 4.88	90	4.56 \pm 6.48
Cortisol awakening rise	86	13.98 \pm 17.74	90	9.08 \pm 14.63	89	8.23 \pm 17.26
Total morning cortisol release	87	20.78 \pm 11.87	92	20.13 \pm 10.21	92	20.80 \pm 13.25
Total diurnal cortisol release						
Mean [with t(+30)]	89	12.87 \pm 6.59	93	12.43 \pm 6.37	93	13.12 \pm 8.06
Mean [without t(+30)]	89	7.97 \pm 4.32	93	8.58 \pm 5.49	93	9.32 \pm 6.31
Diurnal cortisol decline						
Delta [t(+30) – t(20:00)]	83	25.70 \pm 18.93	85	21.10 \pm 15.00	86	19.10 \pm 15.66
Delta [t(+0) – t(20:00)]	80	11.37 \pm 10.15	86	12.12 \pm 9.94	87	12.06 \pm 11.42

Values are nmol/l

Table 49: Association between body mass index and cortisol levels

	Body mass index							
	Day 1+2		Day 1		Day 2		Day 3	
	N	r [†]	N	r	N	r	N	r
Study 1								
t(+0)	194	-.07	96	-.11	98	-.02	--	--
t(+30)	192	-.07	94	-.01	98	-.12	--	--
t(08:00)	182	-.11	90	-.07	92	-.16	--	--
t(11:00)	184	-.10	92	-.05	92	-.15	--	--
t(15:00)	184	-.09	94	-.11	90	-.06	--	--
t(20:00)	177	-.07	91	.02	86	-.17	--	--
Cortisol awakening rise	190	.01	94	.08	96	-.07	--	--
Total morning cortisol release	196	-.07	96	-.07	100	-.06	--	--
Total diurnal cortisol release								
Mean [with t(+30)]	182	-.09	91	-.08	91	-.10	--	--
Mean [without t(+30)]	182	-.11	91	-.12	91	-.12	--	--
AUC [with t(+30)]	182	-.06	91	-.11	91	-.02	--	--
AUC [without t(+30)]	182	-.06	91	-.10	91	-.01	--	--
Diurnal cortisol decline								
Slope [without t(+0)]	182	.03	91	.02	91	.04	--	--
Slope [without t(+30)]	182	.07	91	.10	91	.02	--	--
Delta [t(+30) – t(20:00)]	172	-.04	87	-.03	85	-.06	--	--
Delta [t(+0) – t(20:00)]	173	-.07	89	-.18	84	.05	--	--
	Day 1+2+3		Day 1		Day 2		Day 3	
	N	r [†]	N	r	N	r	N	r
Study 2								
t(+0)	927	-.03	307	-.03	311	.00	309	-.05
t(+30)	918	.05	308	.02	306	.09	304	.05
t(16:00)	929	-.02	309	-.02	314	.02	306	-.08
t(20:00)	897	-.09	300	-.09	295	-.08	302	-.10
Cortisol awakening rise	895	.08	298	.03	300	.08	297	.13*
Total morning cortisol release	927	.02	307	.01	311	.07	309	-.01
Total diurnal cortisol release								
Mean [with t(+30)]	933	-.01	311	-.04	310	.03	312	-.01
Mean [without t(+30)]	933	-.07*	311	-.07	310	-.04	312	-.10
AUC [with t(+30)]	933	.04	311	.01	310	.07	312	.03
AUC [without t(+30)]	913	-.04	302	-.07	307	-.03	304	-.03
Diurnal cortisol decline								
Slope [without t(+0)]	933	-.06	311	.00	310	-.08	312	-.10
Slope [without t(+30)]	933	.00	311	.01	310	-.04	312	.03
Delta [t(+30) – t(20:00)]	861	.09**	289	.04	283	.12*	289	.11
Delta [t(+0) – t(20:00)]	869	.00	290	.02	286	.00	293	-.02

†Pearson correlation coefficients; * p< 0.05; ** p< 0.01; body mass index: weight (kg) / height squared (m²)

Table 50: Association between blood pressure and cortisol levels

	Day 1+2		Day 1		Day 2		Day 3	
	N	SBP / DBP r	N	SBP / DBP r	N	SBP / DBP r	N	SBP / DBP r
Study 1								
t(+0)	192	.19** / .32**	95	.17 / .30**	97	.20* / .34**	--	--
t(+30)	190	.21** / .25**	93	.24* / .25*	97	.18 / .26*	--	--
t(08:00)	182	.11 / .21**	90	.12 / .22*	92	.09 / .19*	--	--
t(11:00)	183	-.02 / .02	91	-.02 / .02	92	-.02 / .01	--	--
t(15:00)	184	.12 / .17*	94	.02 / .09	90	.21* / .24*	--	--
t(20:00)	177	.06 / .02	91	.14 / .08	86	-.03 / -.05	--	--
Cortisol awakening rise	188	.08 / .05	93	.12 / .04	95	.05 / .06	--	--
Total morning cortisol	194	.24** / .32**	95	.26* / .33**	99	.22* / .32**	--	--
Total diurnal cortisol								
Mean [with t(+30)]	182	.22** / .27**	91	.21* / .24*	91	.23* / .30**	--	--
Mean [without t(+30)]	182	.18* / .25**	91	.16 / .23*	91	.20* / .28**	--	--
AUC [with t(+30)]	182	.15* / .17*	91	.11 / .12	91	.20 / .22*	--	--
AUC [without t(+30)]	182	.16* / .21*	91	.10 / .16	91	.22* / .25*	--	--
Diurnal cortisol decline								
Slope [without t(+0)]	182	-.22** / -.24**	91	-.25* / -.25*	91	-.18 / -.23*	--	--
Slope [without t(+30)]	182	-.21** / -.31**	91	-.21* / -.32**	91	-.21* / -.31**	--	--
Delta [t(+30) – t(20:00)]	172	.26** / .29**	87	.25* / .25*	85	.27* / .34**	--	--
Delta [t(+0) – t(20:00)]	173	.21** / .30**	89	.21* / .32**	84	.21* / .28**	--	--
	Day 1+2+3		Day 1		Day 2		Day 3	
	N	SBP / DBP r [†]	N	SBP / DBP r	N	SBP / DBP r	N	SBP / DBP r
Study 2								
t(+0)	928	.05 / .07*	307	.07 / .10	312	.10 / .13*	309	-.02 / -.03
t(+30)	919	.01 / .02	308	-.04 / .00	307	.06 / .01	304	.02 / .06
t(16:00)	929	.06 / .05	309	.06 / .02	314	.05 / .09	306	.08 / .03
t(20:00)	898	.08 / .05	301	.11 / .07	295	.10 / .11	302	.04 / -.01
Cortisol awakening rise	896	-.04 / -.04	298	-.09 / -.09	301	-.04 / -.07	297	.00 / .05
Total morning cortisol	928	.04 / .05	307	.02 / .05	312	.10 / .10	309	.00 / .01
Total diurnal cortisol								
Mean [with t(+30)]	934	.04 / .06	311	.00 / .03	311	.10 / .11*	312	.03 / .04
Mean [without t(+30)]	934	.08 / .09	311	.09 / .10	311	.13* / .17**	312	.03 / .00
AUC [with t(+30)]	934	.07 / .05	311	.04 / .03	311	.11 / .05	312	.07 / .07
AUC [without t(+30)]	914	.06 / .08	302	.02 / .05	308	.11 / .17**	304	.05 / .02
Diurnal cortisol decline								
Slope [without t(+0)]	934	.00 / -.01	311	.05 / .04	311	-.03 / .00	312	-.02 / -.07
Slope [without t(+30)]	934	-.05 / -.06	311	-.05 / -.09	311	-.10 / -.11	312	.00 / .01
Delta [t(+30) – t(20:00)]	863	.01 / .03	290	-.02 / -.01	284	.04 / .03	289	.01 / .06
Delta [t(+0) – t(20:00)]	871	.05 / .05	291	.05 / .07	287	.11 / .10	293	.00 / -.01

[†]Pearson correlation coefficients; * p< 0.05; ** p< 0.01; SBP= systolic blood pressure (mmHg); DBP= diastolic blood pressure (mmHg)

Table 51: Association between waist-to-hip ratio and cortisol levels

	Waist-to-hip ratio							
	Day 1+2		Day 1		Day 2		Day 3	
	N	r [†]	N	r	N	r	N	r
Study 2								
t(+0)	500	.07	166	.12	168	.09	166	.02
t(+30)	498	.09	170	.10	163	.09	165	.09
t(16:00)	504	.09	167	.01	171	.18*	166	.07
t(20:00)	492	-.04	161	-.03	166	-.10	165	.01
Cortisol awakening rise	484	.08	164	.05	160	.09	160	.11
Total morning cortisol release	500	.09	166	.12	168	.09	166	.06
Total diurnal cortisol release								
Mean [with t(+30)]	508	.10	169	.10	169	.09	170	.10
Mean [without t(+30)]	508	.07	169	.07	169	.10	170	.04
AUC [with t(+30)]	508	.08	169	.06	169	.04	170	.13
AUC [without t(+30)]	499	.07	165	.05	168	.09	166	.07
Diurnal cortisol decline								
Slope [without t(+0)]	508	-.12	169	-.11	169	-.10	170	-.13
Slope [without t(+30)]	508	-.02	169	-.08	169	.00	170	.02
Delta [t(+30) – t(20:00)]	475	.09	160	.11	157	.06	158	.10
Delta [t(+0) – t(20:00)]	476	.05	156	.09	161	.05	159	.00

[†]Pearson correlation coefficients; * p< 0.05; ** p< 0.01; waist-to-hip ratio: waist circumference (cm) / hip circumference (cm).

Table 52: Association between depressive symptoms and cortisol levels

	Depressive symptoms							
	Day 1+2		Day 1		Day 2		Day 3	
	N	r ⁺	N	r	N	r	N	r
Study 1								
t(+0)	178	.17*	88	.16	90	.18	--	--
t(+30)	176	.14	86	.04	90	.24*	--	--
t(08:00)	166	.11	82	.14	84	.08	--	--
t(11:00)	169	.19*	85	.24*	84	.13	--	--
t(15:00)	170	.11	86	.16	84	.06	--	--
t(20:00)	161	-.06	83	-.04	78	-.09	--	--
Cortisol awakening rise	174	.04	86	-.04	88	.13	--	--
Total morning cortisol release	180	.16*	88	.08	92	.24*	--	--
Total diurnal cortisol release								
Mean [with t(+30)]	166	.15	83	.09	83	.19	--	--
Mean [without t(+30)]	166	.14	83	.15	83	.13	--	--
AUC [with t(+30)]	166	.13	83	.06	83	.20	--	--
AUC [without t(+30)]	166	.12	83	.10	83	.14	--	--
Diurnal cortisol decline								
Slope [without t(+0)]	166	-.10	83	.00	83	.21	--	--
Slope [without t(+30)]	166	-.13	83	-.10	83	-.17	--	--
Delta [t(+30) – t(20:00)]	156	.10	79	.05	77	.15	--	--
Delta [t(+0) – t(20:00)]	157	.19*	81	.18	76	.20	--	--
	Day 1+2+3		Day 1		Day 2		Day 3	
	N	r ⁺	N	r	N	R	N	r
Study 2								
t(+0)	898	-.04	297	-.02	301	-.03	300	-.07
t(+30)	889	-.07*	297	-.03	297	-.08	295	-.10
t(16:00)	901	.00	300	-.01	304	-.04	297	-.03
t(20:00)	874	-.01	292	-.02	289	-.01	293	.00
Cortisol awakening rise	867	-.05	288	.00	291	-.06	288	-.10
Total morning cortisol release	898	-.08*	297	-.02	301	-.07	300	-.13*
Total diurnal cortisol release								
Mean [with t(+30)]	906	-.04	302	.00	301	-.09	303	-.05
Mean [without t(+30)]	906	-.02	302	-.02	301	-.07	303	.02
AUC [with t(+30)]	906	-.07*	302	-.04	301	-.06	303	-.11
AUC [without t(+30)]	887	-.02	294	.02	298	-.07	295	-.01
Diurnal cortisol decline								
Slope [without t(+0)]	906	.07*	302	.03	301	.11	303	.09
Slope [without t(+30)]	906	.03	302	.03	301	.04	303	.01
Delta [t(+30) – t(20:00)]	837	-.06	280	-.01	277	-.05	280	-.11
Delta [t(+0) – t(20:00)]	845	-.01	281	-.02	280	-.01	284	-.01

+Pearson correlation coefficients; * p< 0.05; ** p< 0.01; depressive symptoms: percentile rank (ADS; Hautzinger & Bailer, 1995)

Table 53: Association between trait anxiety and cortisol levels

	Trait anxiety							
	Day 1+2		Day 1		Day 2		Day 3	
	N	r [†]	N	r	N	r	N	r
Study 1								
t(+0)	187	.05	93	.09	94	.01	--	--
t(+30)	185	.03	91	-.04	94	.10	--	--
t(08:00)	175	.12	87	.20	88	.03	--	--
t(11:00)	178	.13	89	.20	89	.06	--	--
t(15:00)	178	.10	91	.09	87	.11	--	--
t(20:00)	170	.03	88	.03	82	.02	--	--
Cortisol awakening rise	183	.00	91	-.10	92	.10	--	--
Total morning cortisol release	189	.03	93	-.01	96	.06	--	--
Total diurnal cortisol release								
Mean [with t(+30)]	175	.05	88	.04	87	.06	--	--
Mean [without t(+30)]	175	.08	88	.13	87	.03	--	--
AUC [with t(+30)]	175	.08	88	.07	87	.09	--	--
AUC [without t(+30)]	175	.08	88	.11	87	.04	--	--
Diurnal cortisol decline								
Slope [without t(+0)]	175	-.01	88	.04	87	-.07	--	--
Slope [without t(+30)]	175	-.06	88	-.12	87	.01	--	--
Delta [t(+30) – t(20:00)]	165	.00	84	-.05	81	.05	--	--
Delta [t(+0) – t(20:00)]	166	.08	86	.12	80	.04	--	--
	Day 1+2+3		Day 1		Day 2		Day 3	
	N	r [†]	N	r	N	r	N	r
Study 2								
t(+0)	947	-.02	313	-.01	318	-.02	316	-.03
t(+30)	938	-.09**	314	-.09	313	-.09	311	-.08
t(16:00)	948	-.04	315	-.03	321	-.08	312	-.02
t(20:00)	916	-.03	306	-.04	302	-.03	308	-.01
Cortisol awakening rise	915	-.08*	304	-.07	307	-.09	304	-.08
Total morning cortisol release	947	-.07*	313	-.05	318	-.07	316	-.09
Total diurnal cortisol release								
Mean [with t(+30)]	953	-.05	317	-.02	317	-.10	319	-.02
Mean [without t(+30)]	953	-.02	317	-.01	317	-.07	319	.02
AUC [with t(+30)]	953	-.07*	317	-.07	317	-.08	319	-.07
AUC [without t(+30)]	932	-.01	308	.03	314	-.07	310	.00
Diurnal cortisol decline								
Slope [without t(+0)]	953	.06	317	.05	317	.09	319	.06
Slope [without t(+30)]	953	.00	317	.00	317	.00	319	.00
Delta [t(+30) – t(20:00)]	879	-.07*	294	-.06	290	-.06	295	-.10
Delta [t(+0) – t(20:00)]	887	.00	295	.00	293	.03	299	-.02

[†]Pearson correlation coefficients; * p< 0.05; ** p< 0.01; trait anxiety: percentile rank (STAI-T; Laux et al., 1981)

Table 54: Association between burnout/emotional exhaustion and cortisol levels

	Burnout – emotional exhaustion							
	Day 1+2		Day 1		Day 2		Day 3	
	N	r [†]	N	r	N	r	N	r
Study 1								
t(+0)	179	.13	89	.15	90	.10	--	--
t(+30)	177	.11	87	.08	90	.14	--	--
t(08:00)	168	.06	83	.17	85	-.06	--	--
t(11:00)	170	.14	85	.12	85	.16	--	--
t(15:00)	171	.14	87	.11	84	.16	--	--
t(20:00)	163	.02	84	.18	79	-.14	--	--
Cortisol awakening rise	175	.04	87	.01	88	.07	--	--
Total morning cortisol release	181	.13	89	.11	92	.15	--	--
Total diurnal cortisol release								
Mean [with t(+30)]	167	.10	84	.09	83	.11	--	--
Mean [without t(+30)]	167	.10	84	.14	83	.06	--	--
AUC [with t(+30)]	167	.14	84	.13	83	.14	--	--
AUC [without t(+30)]	167	.12	84	.14	83	.09	--	--
Diurnal cortisol decline								
Slope [without t(+0)]	167	-.09	84	-.06	83	-.12	--	--
Slope [without t(+30)]	167	-.09	84	-.11	83	-.06	--	--
Delta [t(+30) – t(20:00)]	158	.08	80	.06	78	.10	--	--
Delta [t(+0) – t(20:00)]	159	.11	82	.14	77	.09	--	--
	Day 1+2+3		Day 1		Day 2		Day 3	
	N	r [†]	N	r	N	r	N	r
Study 2								
t(+0)	829	-.02	272	.00	280	-.08	277	.00
t(+30)	820	-.10*	274	-.10	274	-.05	272	-.14*
t(16:00)	831	-.04	276	.00	280	-.09	275	-.02
t(20:00)	806	-.04	270	-.06	265	-.03	271	-.02
Cortisol awakening rise	799	-.06	264	-.07	270	.03	265	-.15*
Total morning cortisol release	829	-.09*	272	-.07	280	-.08	277	-.10
Total diurnal cortisol release								
Mean [with t(+30)]	837	-.06	278	-.06	278	-.09	281	-.04
Mean [without t(+30)]	837	-.04	278	-.02	278	-.12*	281	.02
AUC [with t(+30)]	837	-.11**	278	-.11	278	-.09	281	-.14*
AUC [without t(+30)]	818	-.02	270	.02	275	-.12*	273	.03
Diurnal cortisol decline								
Slope [without t(+0)]	837	.08*	278	.08	278	.03	281	.12*
Slope [without t(+30)]	837	.03	278	.02	278	.09	281	-.01
Delta [t(+30) – t(20:00)]	771	-.08*	258	-.06	254	-.03	259	-.13*
Delta [t(+0) – t(20:00)]	781	-.03	256	.00	259	-.07	263	.00

[†]Pearson correlation coefficients; * p< 0.05; ** p< 0.01; burnout - emotional exhaustion: T-values (MBI; Enzmann & Kleiber, 1989)

Table 55: Association between burnout/depersonalization and cortisol levels

	Burnout – depersonalization							
	Day 1+2		Day 1		Day 2		Day 3	
	N	r ⁺	N	r	N	r	N	r
Study 1								
t(+0)	184	-.02	91	.00	93	-.07	--	--
t(+30)	182	-.07	89	-.13	93	-.01	--	--
t(08:00)	172	.02	85	.02	87	.02	--	--
t(11:00)	174	.04	87	.07	87	.02	--	--
t(15:00)	175	.06	89	.07	86	.05	--	--
t(20:00)	168	.04	86	.03	82	.04	--	--
Cortisol awakening rise	180	-.04	89	-.12	91	.04	--	--
Total morning cortisol release	186	-.07	91	-.08	95	-.05	--	--
Total diurnal cortisol release								
Mean [with t(+30)]	172	-.04	86	-.09	86	.00	--	--
Mean [without t(+30)]	172	.01	86	.00	86	.01	--	--
AUC [with t(+30)]	172	.04	86	-.02	86	.10	--	--
AUC [without t(+30)]	172	.05	86	.03	86	.07	--	--
Diurnal cortisol decline								
Slope [without t(+0)]	172	.13	86	.17	86	.09	--	--
Slope [without t(+30)]	172	.08	86	.08	86	.09	--	--
Delta [t(+30) – t(20:00)]	163	-.13	82	-.16	81	-.11	--	--
Delta [t(+0) – t(20:00)]	164	-.09	84	-.07	80	-.12	--	--
	Day 1+2+3		Day 1		Day 2		Day 3	
	N	r ⁺	N	r	N	r	N	r
Study 2								
t(+0)	849	.04	279	.06	287	.05	283	.02
t(+30)	840	-.05	281	-.08	281	-.05	278	-.01
t(16:00)	850	.00	283	-.04	287	.01	280	.02
t(20:00)	823	-.03	276	-.01	270	-.05	277	-.02
Cortisol awakening rise	819	-.06	271	-.09	277	-.08	271	-.01
Total morning cortisol release	849	-.01	279	-.02	287	-.01	283	.00
Total diurnal cortisol release								
Mean [with t(+30)]	857	-.01	285	-.04	285	-.01	287	.02
Mean [without t(+30)]	857	.02	285	.02	285	.03	287	.02
AUC [with t(+30)]	857	-.02	285	-.03	285	-.04	287	.01
AUC [without t(+30)]	837	.05	277	.02	282	.07	278	.06
Diurnal cortisol decline								
Slope [without t(+0)]	857	.05	285	.09	285	.07	287	-.01
Slope [without t(+30)]	857	-.02	285	.00	285	-.05	287	.00
Delta [t(+30) – t(20:00)]	788	-.05	264	-.08	259	-.09	265	.01
Delta [t(+0) – t(20:00)]	798	.01	265	.01	264	.00	269	.02

⁺Pearson correlation coefficients; * p< 0.05; ** p< 0.01; burnout - depersonalization: T-values (MBI; Enzmann & Kleiber, 1989)

Table 56: Association between burnout/reduced personal accomplishment and cortisol levels

	Burnout – reduced personal accomplishment							
	Day 1+2		Day 1		Day 2		Day 3	
	N	r ⁺	N	r	N	r	N	r
Study 1								
t(+0)	186	.09	92	.11	94	.07	--	--
t(+30)	184	.07	90	.08	94	.06	--	--
t(08:00)	174	.19*	86	.22*	88	.16	--	--
t(11:00)	176	.17*	88	.14	88	.19	--	--
t(15:00)	178	.16*	90	.09	88	.24*	--	--
t(20:00)	169	.08	87	.04	82	.12	--	--
Cortisol awakening rise	182	.01	90	.00	92	.02	--	--
Total morning cortisol release	188	.08	92	.10	96	.05	--	--
Total diurnal cortisol release								
Mean [with t(+30)]	174	.16*	87	.15	87	.16	--	--
Mean [without t(+30)]	174	.17*	87	.16	87	.18	--	--
AUC [with t(+30)]	174	.18*	87	.14	87	.23*	--	--
AUC [without t(+30)]	174	.19*	87	.17	87	.22*	--	--
Diurnal cortisol decline								
Slope [without t(+0)]	174	-.12	87	-.14	87	-.10	--	--
Slope [without t(+30)]	174	-.11	87	-.17	87	-.04	--	--
Delta [t(+30) – t(20:00)]	164	.06	83	.08	81	.04	--	--
Delta [t(+0) – t(20:00)]	165	.07	85	.13	80	.00	--	--
	Day 1+2+3		Day 1		Day 2		Day 3	
	N	r ⁺	N	r	N	r	N	r
Study 2								
t(+0)	838	-.01	275	.01	283	.00	280	-.01
t(+30)	829	-.11**	277	-.13*	277	-.15*	275	-.08
t(16:00)	840	-.11**	280	-.12*	283	-.07	277	-.13*
t(20:00)	815	-.05	273	-.03	267	-.13*	275	.01
Cortisol awakening rise	808	-.10**	267	-.12*	273	-.11	268	-.06
Total morning cortisol release	838	-.10**	275	-.11	283	-.12*	280	-.08
Total diurnal cortisol release								
Mean [with t(+30)]	846	-.10**	281	-.08	281	-.15*	284	-.07
Mean [without t(+30)]	846	-.05	281	-.04	281	-.08	284	-.03
AUC [with t(+30)]	846	-.12**	281	-.12*	281	-.11*	284	-.11*
AUC [without t(+30)]	827	-.04	274	-.01	278	-.06	275	-.03
Diurnal cortisol decline								
Slope [without t(+0)]	846	.10**	281	.12*	281	.11	284	.07
Slope [without t(+30)]	846	.00	281	.01	281	-.02	284	.00
Delta [t(+30) – t(20:00)]	780	-.10**	261	-.10	256	-.10	263	-.09
Delta [t(+0) – t(20:00)]	790	-.01	262	-.01	261	.03	267	-.04

+Pearson correlation coefficients; * p< 0.05; ** p< 0.01; burnout – reduced personal accomplishment: T-values (MBI; Enzmann & Kleiber, 1989)

Table 57: Association between self-efficacy and cortisol levels

	Self-efficacy							
	Day 1+2		Day 1		Day 2		Day 3	
	N	r ⁺	N	r	N	r	N	r
Study 1								
t(+0)	190	-.20**	94	-.16	96	-.25*	--	--
t(+30)	188	-.13	92	-.02	96	-.23*	--	--
t(08:00)	178	-.14	88	-.07	90	-.21*	--	--
t(11:00)	181	-.22**	90	-.29**	91	-.15	--	--
t(15:00)	182	-.11	93	-.16	89	-.07	--	--
t(20:00)	173	.09	89	.11	84	.06	--	--
Cortisol awakening rise	186	.00	92	.11	94	-.12	--	--
Total morning cortisol release	192	-.17*	94	-.07	98	-.26*	--	--
Total diurnal cortisol release								
Mean [with t(+30)]	179	-.17*	89	-.09	90	-.25*	--	--
Mean [without t(+30)]	179	-.18*	89	-.14	90	-.23*	--	--
AUC [with t(+30)]	179	-.15*	89	-.07	90	-.23*	--	--
AUC [without t(+30)]	179	-.17*	89	-.12	90	-.22*	--	--
Diurnal cortisol decline								
Slope [without t(+0)]	179	.13	89	-.01	90	.27**	--	--
Slope [without t(+30)]	179	.18*	89	.09	90	.28**	--	--
Delta [t(+30) – t(20:00)]	168	-.13	85	-.06	83	-.21	--	--
Delta [t(+0) – t(20:00)]	169	-.23**	87	-.22*	82	-.25*	--	--
	Day 1+2+3		Day 1		Day 2		Day 3	
	N	r ⁺	N	r	N	r	N	r
Study 2								
t(+0)	917	.00	303	.01	308	.02	306	-.01
t(+30)	909	.08*	304	.09	304	.09	301	.06
t(16:00)	920	.05	307	.00	311	.11	302	.06
t(20:00)	890	.07*	297	.10	294	.06	299	.06
Cortisol awakening rise	886	.07*	294	.08	298	.10	294	.03
Total morning cortisol release	917	.06	303	.06	308	.06	306	.05
Total diurnal cortisol release								
Mean [with t(+30)]	925	.05	308	.02	308	.07	309	.05
Mean [without t(+30)]	925	.03	308	.00	308	.07	309	.02
AUC [with t(+30)]	925	.08*	308	.05	308	.06	309	.12*
AUC [without t(+30)]	905	.01	300	-.04	305	.05	300	.03
Diurnal cortisol decline								
Slope [without t(+0)]	925	-.06	308	-.08	308	-.07	309	-.04
Slope [without t(+30)]	925	-.01	308	-.03	308	-.01	309	.01
Delta [t(+30) – t(20:00)]	853	.07*	285	.05	282	.10	286	.06
Delta [t(+0) – t(20:00)]	861	.00	286	-.01	285	.00	290	.01

⁺Pearson correlation coefficients; * p< 0.05; ** p< 0.01; self-efficacy: T-values (SWE; Schwarzer & Jerusalem, 1995)

Table 58: Descriptive statistics of psychological strain (study 1)

	Psychological strain [†]			
	Day 1		Day 2	
	N	Mean ± SD	N	Mean ± SD
Study 1				
t(+0)	88	2.92 ± 0.94	90	2.99 ± 1.03
t(+30)	87	3.04 ± 0.92	86	3.08 ± 0.99
t(08:00)	80	3.26 ± 0.98	85	3.33 ± 1.03
t(11:00)	82	3.38 ± 1.00	85	3.63 ± 1.14
t(15:00)	87	3.03 ± 1.03	86	3.25 ± 1.05
t(20:00)	85	2.63 ± 1.01	81	2.55 ± 0.94

[†]Psychological strain (KAB; Mueller & Basler, 1993).

Table 59: Descriptive statistics of psychological strain by gender (study 1)

	Men				Women			
	Day 1		Day 2		Day 1		Day 2	
	N	Mean ± SD	N	Mean ± SD	N	Mean ± SD	N	Mean ± SD
Study 1								
t(+0)	20	3.11 ± 0.91	20	3.16 ± 1.07	68	2.87 ± 0.95	70	2.94 ± 1.02
t(+30)	20	3.13 ± 1.08	20	3.20 ± 1.07	67	3.01 ± 0.88	66	3.05 ± 0.97
t(08:00)	20	3.33 ± 0.99	20	3.42 ± 1.16	60	3.24 ± 0.99	65	3.31 ± 0.99
t(11:00)	18	3.43 ± 0.80	19	3.77 ± 1.26	64	3.36 ± 1.05	66	3.58 ± 1.10
t(15:00)	19	2.96 ± 0.93	19	3.40 ± 1.00	68	3.05 ± 1.07	67	3.21 ± 1.06
t(20:00)	20	2.57 ± 0.88	17	2.25 ± 0.80	65	2.65 ± 1.06	64	2.63 ± 0.97

Psychological strain (KAB; Mueller & Basler, 1993).

Table 60: Descriptive statistics of psychological strain by occupational groups (study 1)

	Nurses				Teachers			
	Day 1		Day 2		Day 1		Day 2	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1								
t(+0)	40	2.72 \pm 0.82	42	2.90 \pm 1.01	20	3.36 \pm 0.87	20	2.93 \pm 0.94
t(+30)	40	3.01 \pm 0.83	39	3.00 \pm 1.03	19	3.03 \pm 1.04	20	3.14 \pm 0.94
t(08:00)	35	3.30 \pm 0.89	38	3.21 \pm 1.01	17	3.15 \pm 0.88	19	3.46 \pm 0.88
t(11:00)	34	3.27 \pm 1.14	39	3.53 \pm 1.19	20	3.53 \pm 0.74	19	3.57 \pm 1.09
t(15:00)	40	2.91 \pm 1.02	40	3.19 \pm 1.08	19	2.68 \pm 0.89	19	3.01 \pm 0.94
t(20:00)	39	2.56 \pm 1.00	35	2.61 \pm 1.02	20	2.62 \pm 1.10	19	2.34 \pm 0.87
	Hotel staff				Social service assistants			
	Day 1		Day 2		Day 1		Day 2	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1								
t(+0)	8	2.77 \pm 1.02	8	2.83 \pm 1.19	20	2.96 \pm 1.13	20	3.28 \pm 1.10
t(+30)	8	3.06 \pm 0.95	7	2.86 \pm 0.90	20	3.01 \pm 1.04	20	3.26 \pm 1.04
t(08:00)	8	2.96 \pm 1.26	8	3.21 \pm 0.98	20	3.42 \pm 1.12	20	3.48 \pm 1.23
t(11:00)	7	3.36 \pm 1.10	8	3.48 \pm 0.99	21	3.41 \pm 0.98	19	3.94 \pm 1.15
t(15:00)	8	3.08 \pm 0.90	8	3.71 \pm 0.84	20	3.60 \pm 1.07	19	3.42 \pm 1.13
t(20:00)	8	2.35 \pm 0.96	8	2.54 \pm 0.74	18	2.91 \pm 1.01	19	2.66 \pm 0.97

Psychological strain (KAB; Mueller & Basler, 1993).

Table 61: Descriptive statistics of psychological strain by shift work (study 1)

	No shift work				Shift work			
	Day 1		Day 2		Day 1		Day 2	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1								
t(+0)	35	2.71 \pm 0.84	39	2.95 \pm 0.94	40	3.08 \pm 0.97	39	3.10 \pm 1.16
t(+30)	37	3.02 \pm 0.87	36	3.11 \pm 0.98	37	3.07 \pm 0.97	38	3.14 \pm 1.05
t(08:00)	34	3.31 \pm 0.90	37	3.28 \pm 0.98	35	3.19 \pm 1.08	37	3.43 \pm 1.11
t(11:00)	32	3.32 \pm 1.05	35	3.70 \pm 0.90	37	3.50 \pm 1.02	39	3.67 \pm 1.29
t(15:00)	37	2.93 \pm 1.05	38	3.34 \pm 1.03	38	3.00 \pm 1.07	38	3.28 \pm 1.10
t(20:00)	36	2.57 \pm 0.99	34	2.74 \pm 0.96	38	2.68 \pm 1.09	36	2.43 \pm 0.93

Psychological strain (KAB; Mueller & Basler, 1993).

Table 62: Descriptive statistics of psychological strain by somatic complaints (study 1)

	Low degree of somatic complaints				High degree of somatic complaints			
	Day 1		Day 2		Day 1		Day 2	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1								
t(+0)	42	2.81 \pm 0.91	43	2.74 \pm 0.93	40	3.06 \pm 0.98	42	3.26 \pm 1.10
t(+30)	40	2.86 \pm 0.73	40	2.75 \pm 0.88	41	3.19 \pm 1.08	41	3.43 \pm 1.02
t(08:00)	37	3.06 \pm 1.02	42	3.02 \pm 0.86	37	3.49 \pm 0.95	39	3.70 \pm 1.12
t(11:00)	43	3.26 \pm 0.95	42	3.32 \pm 1.06	33	3.62 \pm 1.06	38	4.05 \pm 1.14
t(15:00)	41	2.94 \pm 1.06	42	3.02 \pm 1.03	41	3.14 \pm 1.03	39	3.58 \pm 1.03
t(20:00)	39	2.38 \pm 0.93	40	2.06 \pm 1.10	41	2.94 \pm 1.05	37	2.54 \pm 0.81

Psychological strain (KAB; Mueller & Basler, 1993); somatic complaints: low/high (median split; Braehler & Scheer, 1995).

Table 63: Descriptive statistics of psychological strain by depressive symptoms (study 1)

	Low degree of depressive symptoms				High degree of depressive symptoms			
	Day 1		Day 2		Day 1		Day 2	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1								
t(+0)	41	2.55 \pm 0.76	43	2.61 \pm 0.88	39	3.29 \pm 1.00	39	3.38 \pm 1.09
t(+30)	41	2.68 \pm 0.72	40	2.68 \pm 0.87	38	3.45 \pm 1.01	38	3.52 \pm 1.01
t(08:00)	36	3.03 \pm 0.81	40	3.05 \pm 0.91	36	3.63 \pm 1.09	38	3.71 \pm 1.10
t(11:00)	38	3.23 \pm 0.79	41	3.18 \pm 0.99	36	3.67 \pm 1.09	36	4.19 \pm 1.11
t(15:00)	41	2.71 \pm 0.92	41	2.88 \pm 0.91	39	3.29 \pm 1.07	37	3.63 \pm 1.07
t(20:00)	39	2.38 \pm 0.91	40	2.53 \pm 1.10	38	2.84 \pm 1.11	36	2.60 \pm 0.81

Psychological strain (KAB; Mueller & Basler, 1993); depressive symptoms: low/high (median split; Hautzinger & Bailer, 1995).

Table 64: Descriptive statistics of psychological strain by trait anxiety (study 1)

	Low trait anxiety				High trait anxiety			
	Day 1		Day 2		Day 1		Day 2	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1								
t(+0)	43	2.55 \pm 0.83	44	2.48 \pm 0.86	41	3.30 \pm 0.94	42	3.46 \pm 0.97
t(+30)	41	2.62 \pm 0.72	41	2.54 \pm 0.80	42	3.43 \pm 0.96	41	3.59 \pm 0.92
t(08:00)	38	2.96 \pm 0.94	41	2.93 \pm 0.89	38	3.59 \pm 0.94	40	3.72 \pm 1.00
t(11:00)	42	3.15 \pm 0.85	43	3.18 \pm 1.04	36	3.74 \pm 1.05	39	4.09 \pm 1.07
t(15:00)	41	2.74 \pm 0.99	43	2.89 \pm 0.99	42	3.28 \pm 0.99	39	3.59 \pm 0.97
t(20:00)	40	2.23 \pm 0.81	41	2.54 \pm 1.10	41	2.99 \pm 1.04	38	2.55 \pm 0.76

Psychological strain (KAB; Mueller & Basler, 1993); trait anxiety: low/high (median split; Laux et al., 1981).

Table 65: Descriptive statistics of psychological strain by emotional exhaustion (study 1)

	Low emotional exhaustion				High emotional exhaustion			
	Day 1		Day 2		Day 1		Day 2	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1								
t(+0)	41	2.69 \pm 0.92	41	2.68 \pm 0.90	39	3.15 \pm 0.96	41	3.29 \pm 1.10
t(+30)	39	2.80 \pm 0.73	38	2.68 \pm 0.87	41	3.27 \pm 1.04	40	3.44 \pm 0.99
t(08:00)	36	3.00 \pm 0.94	39	3.01 \pm 0.81	37	3.59 \pm 0.93	39	3.71 \pm 1.08
t(11:00)	38	3.20 \pm 0.96	41	3.11 \pm 0.97	37	3.65 \pm 0.97	37	4.14 \pm 1.09
t(15:00)	39	2.92 \pm 1.02	40	2.99 \pm 0.95	41	3.12 \pm 1.05	38	3.47 \pm 1.11
t(20:00)	38	2.35 \pm 0.93	39	2.58 \pm 1.02	39	2.82 \pm 1.03	36	2.49 \pm 0.86

Psychological strain (KAB; Mueller & Basler, 1993); emotional exhaustion: low/high (median split; MBI, Enzmann & Kleiber, 1981).

Table 66: Descriptive statistics of psychological strain by depersonalization (study 1)

	Low degree of depersonalization				High degree of depersonalization			
	Day 1		Day 2		Day 1		Day 2	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1								
t(+0)	34	2.74 \pm 0.87	36	2.63 \pm 0.81	49	3.07 \pm 0.98	49	3.29 \pm 1.09
t(+30)	31	2.67 \pm 0.76	35	2.70 \pm 0.87	51	3.28 \pm 0.93	46	3.42 \pm 0.98
t(08:00)	28	3.00 \pm 0.82	32	3.15 \pm 0.99	47	3.48 \pm 1.02	48	3.50 \pm 1.05
t(11:00)	30	3.20 \pm 0.77	35	3.26 \pm 1.12	47	3.52 \pm 1.09	45	3.93 \pm 1.10
t(15:00)	33	2.77 \pm 1.01	36	3.03 \pm 1.13	49	3.25 \pm 1.04	45	3.43 \pm 0.98
t(20:00)	33	2.52 \pm 1.03	34	2.42 \pm 0.93	47	2.70 \pm 1.01	44	2.69 \pm 0.95

Psychological strain (KAB; Mueller & Basler, 1993); depersonalization: low/high (median split; MBI, Enzmann & Kleiber, 1981).

Table 67: Descriptive statistics of psychological strain by personal accomplishment (study 1)

	Low reduced personal accomplishment				High reduced personal accomplishment			
	Day 1		Day 2		Day 1		Day 2	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 1								
t(+0)	41	2.62 \pm 0.75	43	2.79 \pm 1.00	42	3.19 \pm 1.04	42	3.19 \pm 1.04
t(+30)	39	2.75 \pm 0.81	40	2.81 \pm 0.93	43	3.28 \pm 0.95	41	3.39 \pm 1.00
t(08:00)	34	3.00 \pm 0.92	39	3.21 \pm 0.97	41	3.54 \pm 0.96	41	3.54 \pm 1.06
t(11:00)	36	3.25 \pm 0.91	42	3.32 \pm 1.00	41	3.54 \pm 1.03	38	3.96 \pm 1.22
t(15:00)	41	2.83 \pm 0.91	42	2.97 \pm 1.00	41	3.28 \pm 1.12	39	3.51 \pm 1.03
t(20:00)	40	2.47 \pm 1.00	41	2.42 \pm 0.96	40	2.83 \pm 1.06	37	2.73 \pm 0.93

Psychological strain (KAB; Mueller & Basler, 1993); reduced personal accomplishment: low/high (median split; MBI, Enzmann & Kleiber, 1981).

Table 68: Descriptive statistics of mood and well-being (study 2)

	Mood and well-being					
	Day 1		Day 2		Day 3	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 2						
Good mood¹						
t(+30)	324	6.31 \pm 2.00	325	6.45 \pm 2.12	322	6.40 \pm 2.15
t(16:00)	321	6.55 \pm 2.11	322	6.65 \pm 2.07	322	6.70 \pm 2.09
t(20:00)	319	6.90 \pm 2.10	321	6.83 \pm 2.08	313	6.91 \pm 2.03
Alertness²						
t(+30)	328	5.07 \pm 2.47	326	5.13 \pm 2.49	323	4.85 \pm 2.49
t(16:00)	323	5.61 \pm 2.50	322	5.76 \pm 2.39	323	5.55 \pm 2.47
t(20:00)	319	5.39 \pm 2.45	322	5.42 \pm 2.44	313	5.26 \pm 2.35
Relaxation³						
t(+30)	326	6.47 \pm 2.43	324	6.55 \pm 2.49	323	6.49 \pm 2.53
t(16:00)	321	6.35 \pm 2.44	321	6.50 \pm 2.45	323	6.51 \pm 2.54
t(20:00)	318	6.80 \pm 2.31	321	6.80 \pm 2.30	312	6.72 \pm 2.37

¹good vs. bad mood (NRS: 0-10; Steyer et al., 1997); ²alertness vs. tiredness (NRS: 0-10; Steyer et al., 1997);

³relaxation vs. agitation (NRS: 0-10; Steyer et al., 1997).

Table 69: Descriptive statistics of mood and well-being by gender (study 2)

	Men						Women					
	Day 1			Day 2			Day 1			Day 2		
	N	Mean ± SD	N	Mean ± SD	N	Mean ± SD	N	Mean ± SD	N	Mean ± SD	N	Mean ± SD
Study 2												
Good mood¹												
t(+30)	106	6.41 ± 1.87	105	6.49 ± 2.09	105	6.39 ± 2.20	218	6.27 ± 2.06	220	6.44 ± 2.14	217	6.40 ± 2.13
t(16:00)	105	6.70 ± 1.94	105	6.58 ± 1.87	105	6.63 ± 2.04	216	6.48 ± 2.18	217	6.68 ± 2.17	217	6.74 ± 2.11
t(20:00)	102	6.99 ± 1.89	104	6.82 ± 1.86	104	6.80 ± 1.89	217	6.86 ± 2.20	217	6.84 ± 2.18	209	6.97 ± 2.09
Alertness²												
t(+30)	106	5.44 ± 2.44	105	5.35 ± 2.41	105	5.05 ± 2.64	222	4.90 ± 2.47	221	5.03 ± 2.52	218	4.75 ± 5.51
t(16:00)	106	5.80 ± 2.16	105	5.83 ± 2.31	105	5.64 ± 2.41	217	5.51 ± 2.65	217	5.72 ± 2.43	218	5.51 ± 2.49
t(20:00)	102	5.84 ± 2.26	104	5.55 ± 2.40	104	5.25 ± 2.39	217	5.18 ± 2.52	218	5.36 ± 2.46	209	5.26 ± 2.33
Relaxation³												
t(+30)	106	6.44 ± 2.30	104	6.36 ± 2.49	105	6.57 ± 2.43	220	6.48 ± 2.50	220	6.64 ± 2.50	218	6.44 ± 2.58
t(16:00)	105	6.57 ± 2.34	105	6.62 ± 2.24	105	6.46 ± 2.41	216	6.24 ± 2.48	216	6.44 ± 2.55	218	6.53 ± 2.60
t(20:00)	101	6.84 ± 2.26	104	6.90 ± 2.12	104	6.52 ± 2.26	217	6.77 ± 2.33	217	6.76 ± 2.39	208	6.82 ± 2.43

¹good vs. bad mood (NRS: 0-10; Steyer et al., 1997); ²alertness vs. tiredness (NRS: 0-10; Steyer et al., 1997); ³relaxation vs. agitation (NRS: 0-10; Steyer et al., 1997).

Table 70: Descriptive statistics of mood and well-being by occupational groups (study 2)

	Nurses						Teachers					
	Day 1			Day 2			Day 1			Day 2		
	N	Mean \pm SD		N	Mean \pm SD		N	Mean \pm SD		N	Mean \pm SD	
Study 2												
Good mood¹												
t(+30)	79	6.57 \pm 1.96		79	6.73 \pm 2.01	78	6.82 \pm 2.13		107	6.07 \pm 1.99	105	6.15 \pm 2.18
t(16:00)	78	7.19 \pm 1.99		80	7.23 \pm 1.90	78	7.27 \pm 1.94		104	6.27 \pm 2.02	104	6.53 \pm 2.19
t(20:00)	80	7.60 \pm 1.86		80	6.90 \pm 2.14	76	7.04 \pm 2.18		104	6.30 \pm 2.31	103	6.62 \pm 2.20
Alertness²												
t(+30)	81	5.25 \pm 2.43		80	5.18 \pm 2.60	79	5.20 \pm 2.44		106	4.53 \pm 2.38	105	4.72 \pm 2.28
t(16:00)	78	6.06 \pm 2.59		81	5.90 \pm 2.47	78	6.13 \pm 2.48		104	4.93 \pm 2.48	103	5.34 \pm 2.28
t(20:00)	79	6.06 \pm 2.51		81	5.52 \pm 2.46	76	5.04 \pm 2.64		105	4.50 \pm 2.37	103	4.98 \pm 2.42
Relaxation³												
t(+30)	80	7.44 \pm 2.19		79	7.14 \pm 2.46	79	7.38 \pm 2.25		106	5.73 \pm 2.20	104	6.05 \pm 2.30
t(16:00)	78	7.12 \pm 2.39		80	7.09 \pm 2.45	78	7.17 \pm 2.45		104	5.91 \pm 2.37	103	6.08 \pm 2.48
t(20:00)	79	7.24 \pm 2.45		80	7.24 \pm 2.05	75	7.00 \pm 2.54		104	6.47 \pm 2.18	103	6.37 \pm 2.56

¹good vs. bad mood (NRS: 0-10; Steyer et al., 1997); ²alertness vs. tiredness (NRS: 0-10; Steyer et al., 1997); ³relaxation vs. agitation (NRS: 0-10; Steyer et al., 1997).

Table 70 (continued)

Hotel staff						Social service assistants					
Day 1			Day 2			Day 3			Day 1		
N	Mean \pm SD		N	Mean \pm SD		N	Mean \pm SD		N	Mean \pm SD	
Study 2											
Good mood¹											
t(+30)	17	7.06 \pm 2.08	17	7.24 \pm 2.86	17	7.35 \pm 1.84			87	6.08 \pm 1.98	89
t(16:00)	17	7.00 \pm 2.83	17	7.06 \pm 2.28	17	7.41 \pm 1.97			88	6.10 \pm 2.19	86
t(20:00)	16	7.50 \pm 2.71	17	8.00 \pm 1.58	17	7.82 \pm 1.85			87	6.83 \pm 1.92	87
Alertness²											
t(+30)	17	6.29 \pm 2.62	17	5.71 \pm 3.12	17	6.35 \pm 2.45			89	5.11 \pm 2.57	89
t(16:00)	17	5.82 \pm 2.58	17	6.47 \pm 3.16	17	6.47 \pm 2.45			89	5.73 \pm 2.52	86
t(20:00)	17	5.47 \pm 3.00	17	6.35 \pm 3.08	17	6.76 \pm 2.14			87	5.54 \pm 2.28	87
Relaxation³											
t(+30)	17	6.24 \pm 2.93	17	7.00 \pm 3.06	17	7.00 \pm 2.67			88	6.33 \pm 2.57	89
t(16:00)	17	6.65 \pm 2.83	17	7.41 \pm 2.03	17	7.65 \pm 1.77			89	5.87 \pm 2.43	86
t(20:00)	17	6.94 \pm 3.23	17	7.59 \pm 2.62	17	7.88 \pm 2.32			86	6.58 \pm 2.21	87

¹good vs. bad mood (NRS: 0-10; Steyer et al., 1997); ²alertness vs. tiredness (NRS: 0-10; Steyer et al., 1997); ³relaxation vs. agitation (NRS: 0-10; Steyer et al., 1997).

Table 70 (continued)

	Mixed group					
	Day 1		Day 2		Day 3	
	N	Mean ± SD	N	Mean ± SD	N	Mean ± SD
Study 2						
Good mood ¹						
t(+30)	34	6.74 ± 2.03	35	6.74 ± 1.87	35	6.37 ± 1.91
t(16:00)	34	6.91 ± 1.60	35	6.63 ± 1.65	34	6.41 ± 2.11
t(20:00)	32	7.00 ± 1.59	34	6.94 ± 1.79	34	6.71 ± 2.04
Alertness ²						
t(+30)	35	5.63 ± 2.21	35	5.77 ± 2.49	35	5.40 ± 2.21
t(16:00)	35	6.17 ± 1.82	35	6.00 ± 1.97	34	5.53 ± 2.44
t(20:00)	31	6.23 ± 1.83	34	5.44 ± 2.25	34	5.18 ± 2.52
Relaxation ³						
t(+30)	35	6.94 ± 2.31	35	6.97 ± 2.04	35	6.26 ± 2.42
t(16:00)	33	7.03 ± 2.01	35	6.69 ± 2.30	34	6.79 ± 2.19
t(20:00)	32	7.25 ± 1.88	34	7.09 ± 2.02	34	6.74 ± 2.21

¹good vs. bad mood (NRS: 0-10; Steyer et al., 1997); ²alertness vs. tiredness (NRS: 0-10; Steyer et al., 1997); ³relaxation vs. agitation (NRS: 0-10; Steyer et al., 1997).

Table 71: Descriptive statistics of mood and well-being by shift work (study 2)

	No shift work						Shift work					
	Day 1			Day 2			Day 1			Day 2		
	N	Mean ± SD		N	Mean ± SD		N	Mean ± SD		N	Mean ± SD	
Study 2												
Good mood¹												
t(+30)	235	6.21 ± 2.00		236	6.26 ± 2.17	234	83	6.64 ± 1.90		84	6.89 ± 1.95	82
t(16:00)	234	6.31 ± 2.07		233	6.42 ± 2.09	234	82	7.26 ± 1.97		83	7.20 ± 1.94	82
t(20:00)	231	6.64 ± 2.11		232	6.77 ± 2.08	228	83	7.67 ± 1.71		83	6.99 ± 2.07	80
Alertness²												
t(+30)	237	4.97 ± 2.45		236	5.02 ± 2.45	234	85	5.38 ± 2.44		85	5.36 ± 2.60	83
t(16:00)	236	5.44 ± 2.44		232	5.65 ± 2.32	235	82	6.06 ± 2.55		84	5.99 ± 2.53	82
t(20:00)	231	5.10 ± 2.35		232	5.28 ± 2.40	228	83	6.14 ± 2.46		84	5.68 ± 2.53	80
Relaxation³												
t(+30)	236	6.11 ± 2.41		235	6.25 ± 2.47	234	84	7.40 ± 2.26		84	7.24 ± 2.42	83
t(16:00)	234	6.08 ± 2.35		232	6.23 ± 2.43	235	82	6.94 ± 2.54		83	7.10 ± 2.40	82
t(20:00)	230	6.62 ± 2.22		232	6.63 ± 2.39	228	83	7.19 ± 2.51		83	7.23 ± 2.05	79

¹good vs. bad mood (NRS: 0-10; Steyer et al., 1997); ²alertness vs. tiredness (NRS: 0-10; Steyer et al., 1997); ³relaxation vs. agitation (NRS: 0-10; Steyer et al., 1997).

Table 72: Descriptive statistics of mood and well-being by somatic complaints (study 2)

	Low degree of somatic complaints					High degree of somatic complaints				
	Day 1		Day 2		Day 3		Day 1		Day 2	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 2										
Good mood¹										
t(+30)	139	6.95 \pm 1.85	141	7.15 \pm 1.84	138	7.10 \pm 1.79	144	5.78 \pm 1.92	145	5.77 \pm 2.16
t(16:00)	139	7.10 \pm 1.96	139	7.23 \pm 1.89	139	7.33 \pm 1.78	142	6.13 \pm 2.11	144	6.21 \pm 2.01
t(20:00)	136	7.45 \pm 1.84	138	7.38 \pm 1.95	136	7.38 \pm 1.86	143	6.58 \pm 2.02	144	6.38 \pm 2.05
Alertness²										
t(+30)	141	5.66 \pm 2.30	141	5.64 \pm 2.49	139	5.41 \pm 2.40	147	4.67 \pm 2.58	146	4.64 \pm 2.49
t(16:00)	140	6.19 \pm 2.57	139	6.38 \pm 2.26	139	6.29 \pm 2.18	143	5.13 \pm 2.34	145	5.25 \pm 2.36
t(20:00)	136	5.98 \pm 2.40	138	5.93 \pm 2.56	136	5.53 \pm 2.35	143	4.95 \pm 2.33	145	5.10 \pm 2.15
Relaxation³										
t(+30)	140	5.79 \pm 2.41	141	7.16 \pm 2.45	139	7.20 \pm 2.30	146	5.79 \pm 2.41	144	6.01 \pm 2.43
t(16:00)	139	5.97 \pm 2.30	139	7.06 \pm 2.41	139	7.07 \pm 2.50	142	5.97 \pm 2.30	144	5.99 \pm 2.42
t(20:00)	136	6.61 \pm 2.16	138	7.26 \pm 2.15	135	7.20 \pm 2.31	142	6.61 \pm 2.16	144	6.39 \pm 2.34

¹good vs. bad mood (NRS: 0-10; Steyer et al., 1997); ²alertness vs. tiredness (NRS: 0-10; Steyer et al., 1997); ³relaxation vs. agitation (NRS: 0-10; Steyer et al., 1997); somatic complaints: low/high (median split; Braehler & Scheer, 1995).

Table 73: Descriptive statistics of mood and well-being by depressive symptoms (study 2)

		Low degree of depressive symptoms						High degree of depressive symptoms					
		Day 1			Day 2			Day 1			Day 2		
		N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 2													
Good mood¹													
t(+30)		142	7.10 \pm 1.78	143	7.27 \pm 1.83	140	7.04 \pm 1.95	162	5.57 \pm 1.94	162	5.65 \pm 2.11	163	5.79 \pm 2.20
t(16:00)		142	7.04 \pm 1.98	142	7.23 \pm 1.85	143	7.38 \pm 1.88	159	6.04 \pm 2.14	161	6.09 \pm 2.13	161	6.06 \pm 2.13
t(20:00)		137	7.44 \pm 1.91	142	7.39 \pm 2.06	138	7.50 \pm 1.78	162	6.34 \pm 2.13	160	6.24 \pm 1.95	158	6.35 \pm 2.12
Alertness²													
t(+30)		144	5.71 \pm 2.45	143	5.69 \pm 2.47	141	5.35 \pm 2.47	164	4.52 \pm 2.36	163	4.63 \pm 2.42	163	4.42 \pm 2.44
t(16:00)		142	6.11 \pm 2.52	141	6.50 \pm 2.29	144	6.24 \pm 2.27	161	5.19 \pm 2.41	162	5.04 \pm 2.29	161	4.84 \pm 2.50
t(20:00)		137	5.83 \pm 2.54	142	6.10 \pm 2.51	138	5.89 \pm 2.34	162	4.94 \pm 2.30	161	4.80 \pm 2.14	158	4.59 \pm 2.19
Relaxation³													
t(+30)		143	7.45 \pm 2.07	142	7.46 \pm 2.21	141	7.52 \pm 1.98	163	5.59 \pm 2.43	162	5.73 \pm 2.41	163	5.56 \pm 2.55
t(16:00)		141	6.96 \pm 2.36	141	7.50 \pm 2.06	144	7.45 \pm 2.12	160	5.83 \pm 2.30	161	5.62 \pm 2.43	161	5.72 \pm 2.58
t(20:00)		137	7.39 \pm 2.10	142	7.62 \pm 1.95	137	7.78 \pm 1.71	161	6.30 \pm 2.34	160	6.09 \pm 2.35	158	5.85 \pm 2.47

¹good vs. bad mood (NRS: 0-10; Steyer et al., 1997); ²alertness vs. tiredness (NRS: 0-10; Steyer et al., 1997); ³relaxation vs. agitation (NRS: 0-10; Steyer et al., 1997) ; depressive symptoms: low/high (median split; Hautzinger & Bailer, 1995).

Table 74: Descriptive statistics of mood and well-being by trait anxiety (study 2)

	Low degree of trait anxiety					High degree of trait anxiety				
	Day 1		Day 2		Day 3		Day 1		Day 2	
	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 2										
Good mood¹										
t(+30)	163	7.09 \pm 1.77	163	7.33 \pm 1.80	160	7.16 \pm 1.80	158	5.53 \pm 1.93	159	5.55 \pm 2.06
t(16:00)	160	7.19 \pm 1.99	160	7.32 \pm 1.80	160	7.53 \pm 1.75	158	5.92 \pm 2.05	159	5.97 \pm 2.12
t(20:00)	156	7.67 \pm 1.82	160	7.58 \pm 1.87	155	7.57 \pm 1.79	160	6.16 \pm 2.12	158	6.11 \pm 2.02
Alertness²										
t(+30)	164	5.80 \pm 2.39	163	5.73 \pm 2.51	161	5.53 \pm 2.40	161	4.35 \pm 2.35	160	4.53 \pm 2.33
t(16:00)	161	6.16 \pm 2.48	159	6.50 \pm 2.21	161	6.34 \pm 2.23	159	5.04 \pm 2.40	160	5.01 \pm 2.35
t(20:00)	156	6.06 \pm 2.48	160	6.29 \pm 2.40	155	5.86 \pm 2.29	160	4.72 \pm 2.25	159	4.56 \pm 2.16
Relaxation³										
t(+30)	163	7.48 \pm 2.09	163	7.42 \pm 2.37	161	7.47 \pm 2.26	160	5.44 \pm 2.32	158	5.63 \pm 2.31
t(16:00)	160	7.06 \pm 2.25	159	7.44 \pm 2.19	161	7.48 \pm 2.29	158	5.60 \pm 2.13	159	5.55 \pm 2.36
t(20:00)	156	7.49 \pm 2.19	160	7.54 \pm 2.11	154	7.51 \pm 2.28	159	6.10 \pm 2.24	158	6.09 \pm 2.27

¹good vs. bad mood (NRS: 0-10; Steyer et al., 1997); ²alertness vs. tiredness (NRS: 0-10; Steyer et al., 1997); ³relaxation vs. agitation (NRS: 0-10; Steyer et al., 1997); trait anxiety: low/high (median split; Laux et al., 1981).

Table 75: Descriptive statistics of mood and well-being by emotional exhaustion (study 2)

Low degree of emotional exhaustion										High degree of emotional exhaustion									
	Day 1			Day 2			Day 3			Day 1			Day 2			Day 3			
	N	Mean ± SD		N	Mean ± SD		N	Mean ± SD		N	Mean ± SD		N	Mean ± SD		N	Mean ± SD		
Study 2																			
Good mood ¹																			
t(+30)	126	6.90 ± 1.81		128	7.25 ± 1.77		127	7.23 ± 1.74		154	5.69 ± 1.96		153	5.74 ± 2.22		152	5.68 ± 2.31		
t(16:00)	127	7.20 ± 1.88		127	7.37 ± 1.76		128	7.70 ± 1.49		151	5.83 ± 2.17		152	6.03 ± 2.19		152	5.91 ± 2.27		
t(20:00)	123	7.56 ± 1.76		127	7.46 ± 1.91		125	7.63 ± 1.63		154	6.26 ± 2.23		151	6.30 ± 2.13		148	6.35 ± 2.15		
Alertness ²																			
t(+30)	129	5.76 ± 2.52		128	5.84 ± 2.45		128	5.49 ± 2.39		155	4.40 ± 2.34		154	4.46 ± 2.42		152	4.22 ± 2.52		
t(16:00)	128	6.35 ± 2.51		126	6.54 ± 2.22		128	6.51 ± 2.13		152	4.85 ± 2.41		153	5.03 ± 2.31		153	4.75 ± 2.47		
t(20:00)	124	6.30 ± 2.43		127	6.21 ± 2.41		125	5.96 ± 2.34		154	4.58 ± 2.29		152	4.73 ± 2.26		148	4.71 ± 2.18		
Relaxation ³																			
t(+30)	128	7.52 ± 2.03		128	7.16 ± 2.53		128	7.20 ± 2.43		154	5.58 ± 2.39		152	6.05 ± 2.35		152	5.93 ± 2.48		
t(16:00)	128	6.94 ± 2.47		126	7.21 ± 2.35		128	7.30 ± 2.44		151	5.77 ± 2.30		152	5.91 ± 2.39		153	5.90 ± 2.53		
t(20:00)	122	7.30 ± 2.19		127	7.39 ± 2.21		125	7.41 ± 2.40		154	6.41 ± 2.31		151	6.34 ± 2.34		147	6.22 ± 2.27		

¹good vs. bad mood (NRS: 0-10; Steyer et al., 1997); ²alertness vs. tiredness (NRS: 0-10; Steyer et al., 1997); ³relaxation vs. agitation (NRS: 0-10; Steyer et al., 1997); emotional exhaustion: low/high (median split; MBI, Enzmann & Kleiber, 1981).

Table 76: Descriptive statistics of mood and well-being by depersonalization (study 2)

	Low degree of depersonalization					High degree of depersonalization				
	Day 1		Day 2		Day 3	Day 1		Day 2		Day 3
	N	Mean \pm SD	N	Mean \pm SD	N	N	Mean \pm SD	N	Mean \pm SD	N
Study 2										
Good mood¹										
t(+30)	181	6.33 \pm 1.97	182	6.48 \pm 2.19	179	106	6.05 \pm 1.99	106	6.35 \pm 2.08	106
t(16:00)	178	6.58 \pm 2.13	177	6.80 \pm 2.10	179	107	6.29 \pm 2.14	108	6.41 \pm 2.09	107
t(20:00)	176	6.77 \pm 2.26	178	6.87 \pm 2.18	174	108	6.94 \pm 1.92	106	6.78 \pm 2.01	105
Alertness²										
t(+30)	181	5.12 \pm 2.37	182	5.07 \pm 2.53	180	110	4.80 \pm 2.67	107	5.16 \pm 2.50	106
t(16:00)	178	5.56 \pm 2.57	177	5.71 \pm 2.37	180	108	5.47 \pm 2.54	108	5.69 \pm 2.50	107
t(20:00)	178	5.15 \pm 2.57	178	5.56 \pm 2.49	174	107	5.57 \pm 2.41	107	5.14 \pm 2.38	105
Relaxation³										
t(+30)	181	6.74 \pm 2.34	182	6.69 \pm 2.59	180	108	5.96 \pm 2.54	105	6.17 \pm 2.41	106
t(16:00)	178	6.42 \pm 2.52	177	6.64 \pm 2.38	180	108	6.13 \pm 2.35	107	6.17 \pm 2.67	107
t(20:00)	176	6.74 \pm 2.37	178	6.84 \pm 2.40	173	107	6.78 \pm 2.30	106	6.77 \pm 2.27	105

¹good vs. bad mood (NRS: 0-10; Steyer et al., 1997); ²alertness vs. tiredness (NRS: 0-10; Steyer et al., 1997); ³relaxation vs. agitation (NRS: 0-10; Steyer et al., 1997); depersonalization: low/high (median split; MBI, Enzmann & Kleiber, 1981).

Table 77: Descriptive statistics of mood and well-being by personal accomplishment (study 2)

		Low degree of reduced personal accomplishment				High degree of reduced personal accomplishment			
		Day 1		Day 2		Day 3		Day 1	
		N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD	N	Mean \pm SD
Study 2									
Good mood¹									
	t(+30)	91	6.74 \pm 1.94	92	7.32 \pm 1.95	90	7.27 \pm 1.88	192	5.97 \pm 1.96
	t(16:00)	90	7.01 \pm 2.25	90	7.44 \pm 1.85	90	7.43 \pm 1.72	192	6.20 \pm 2.04
	t(20:00)	88	7.50 \pm 2.17	90	7.36 \pm 2.05	90	7.63 \pm 1.76	192	6.51 \pm 2.07
Alertness²									
	t(+30)	92	5.29 \pm 2.57	92	5.49 \pm 2.43	91	5.24 \pm 2.52	195	4.86 \pm 2.47
	t(16:00)	91	5.88 \pm 2.74	89	6.66 \pm 2.44	91	6.11 \pm 2.42	192	5.39 \pm 2.45
	t(20:00)	89	5.76 \pm 2.71	90	6.02 \pm 2.54	90	5.62 \pm 2.53	192	5.15 \pm 2.40
Relaxation³									
	t(+30)	91	6.79 \pm 2.33	92	6.85 \pm 2.55	91	7.15 \pm 2.07	194	6.28 \pm 2.49
	t(16:00)	91	6.63 \pm 2.73	89	7.39 \pm 2.17	91	7.10 \pm 2.49	192	6.14 \pm 2.31
	t(20:00)	88	7.24 \pm 2.31	90	7.24 \pm 2.03	89	7.43 \pm 2.19	191	6.53 \pm 2.35
								191	6.62 \pm 2.47
								192	6.37 \pm 2.50
								193	6.05 \pm 2.52
								187	6.23 \pm 2.62
								187	6.40 \pm 2.46

¹good vs. bad mood (NRS: 0-10; Steyer et al., 1997); ²alertness vs. tiredness (NRS: 0-10; Steyer et al., 1997); ³relaxation vs. agitation (NRS: 0-10; Steyer et al., 1997); reduced personal accomplishment: low/high (median split; MBI, Enzmann & Kleiber, 1981).

Table 78: Effects on diurnal profiles of psychological strain (study 1)

Dependent variable / groups	Effect	NDF	DDF	F	p
GENDER					
Single samples: t(+0), t(+30), t(08:00), t(11:00), t(15:00), t(20:00)	DAY	1	87	4.19	*
	TIME	5	442	22.15	**
	SEX	1	91	0.37	
	DAY × SEX	1	87	0.08	
	TIME × SEX	5	442	1.32	
OCCUPATIONAL GROUPS					
Single samples: t(+0), t(+30), t(08:00), t(11:00), t(15:00), t(20:00)	DAY	1	85	4.22	*
	TIME	5	432	21.20	**
	OCC	3	89	0.68	
	DAY × OCC	3	85	0.26	
	TIME × OCC	15	432	1.02	
SHIFT WORK					
Single samples: t(+0), t(+30), t(08:00), t(11:00), t(15:00), t(20:00)	DAY	1	75	9.28	**
	TIME	5	380	22.93	**
	SHIFT	1	78	0.03	
	DAY × SHIFT	1	75	0.48	
	TIME × SHIFT	5	380	0.79	
SOMATIC COMPLAINTS					
Single samples: t(+0), t(+30), t(08:00), t(11:00), t(15:00), t(20:00)	DAY	1	82	5.26	*
	TIME	5	413	24.83	**
	GBBB	1	85	9.80	**
	DAY × GBBB	1	82	3.61	
	TIME × GBBB	5	413	0.85	
DEPRESSIVE SYMPTOMS					
Single samples: t(+0), t(+30), t(08:00), t(11:00), t(15:00), t(20:00)	DAY	1	79	4.73	*
	TIME	5	402	27.42	**
	ADS	1	83	22.53	**
	DAY × ADS	1	79	0.87	
	TIME × ADS	51	402	2.29	*
TRAIT ANXIETY					
Single samples: t(+0), t(+30), t(08:00), t(11:00), t(15:00), t(20:00)	DAY	1	83	3.78	
	TIME	5	422	27.37	**
	STAI-T	1	87	31.16	**
	DAY × STAI-T	1	83	0.52	
	TIME × STAI-T	5	422	2.51	*

NDF= numerator degrees of freedom; DDF= denominator degrees of freedom; DAY= sampling day; TIME= sampling time (t(+0) to t(20:00)); SEX = gender; OCC = occupational groups (nurses, teachers, hotel staff, social service assistants); SHIFT = shift work (yes/no); GBBB = somatic complaints (scale: *overall distress*, median-split; Braehler & Scheer, 1993); ADS = depressive symptoms (median-split; CES-D, Hautzinger & Bailer, 1995); STAI-T = trait anxiety (median-split; Laux et al., 1981); mixed models for repeated measures: *p<0.05; ** p<0.01

Table 78 (continued)

Dependent variable / groups	Effect	NDF	DDF	F	p
EMOTIONAL EXHAUSTION					
Single samples:	DAY	1	79	4.24	*
t(+0), t(+30), t(08:00), t(11:00), t(15:00), t(20:00)	TIME	5	403	27.20	**
	EE	1	83	12.95	**
	DAY × EE	1	79	2.07	
	TIME × EE	5	403	2.26	*
DEPERSONALIZATION					
Single samples:	DAY	1	82	4.30	*
t(+0), t(+30), t(08:00), t(11:00), t(15:00), t(20:00)	TIME	5	417	24.43	**
	DP	1	86	9.17	**
	DAY × DP	1	82	1.90	
	TIME × DP	5	417	1.29	
PERSONAL ACCOMPLISHMENT					
Single samples:	DAY	1	82	5.14	*
t(+0), t(+30), t(08:00), t(11:00), t(15:00), t(20:00)	TIME	5	417	25.50	**
	PA	1	86	10.55	**
	DAY × PA	1	82	0.04	
	TIME × PA	5	417	0.52	

NDF= numerator degrees of freedom; DDF= denominator degrees of freedom; DAY= sampling day; TIME= sampling time (t(+0) to t(20:00)); EE = burnout: scale *emotional exhaustion* (MBI, Enzmann & Kleiber, 1989); DP = burnout: scale *depersonalization* (MBI, Enzmann & Kleiber, 1989); PA = burnout: scale *personal accomplishment* (MBI, Enzmann & Kleiber, 1989); mixed models for repeated measures: *p<0.05; ** p<0.01

Table 79: Effect of gender on diurnal profiles of mood and well-being (study 2)

Dependent variable / group	Effect	NDF	DDF	F	p
MOOD / GENDER					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	652	0.06	
	TIME	2	654	22.21	**
	SEX	1	328	0.01	
	DAY × SEX	2	652	1.48	
	TIME × SEX	2	654	0.14	
ALERTNESS / GENDER					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	653	3.64	*
	TIME	2	656	18.06	**
	SEX	1	328	2.53	
	DAY × SEX	2	653	2.05	
	TIME × SEX	2	656	0.67	
RELAXATION / GENDER					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	652	0.34	
	TIME	2	654	7.47	**
	SEX	1	327	0.01	
	DAY × SEX	2	652	0.51	
	TIME × SEX	2	654	0.84	

NDF= numerator degrees of freedom; DDF= denominator degrees of freedom; DAY= sampling day; TIME= sampling time (t(+0) to t(20:00)); SEX = gender; mixed models for repeated measures: *p<0.05; ** p<0.01

Table 80: Effect of occupational group on diurnal profiles of mood and well-being (study 2)

Dependent variable / group	Effect	NDF	DDF	F	p
MOOD / OCCUAPTION					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	646	0.14	
	TIME	2	648	16.64	**
	OCC	4	325	3.93	**
	DAY × OCC	8	646	2.23	*
	TIME × OCC	8	648	2.06	*
ALERTNESS / OCCUPATION					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	647	0.99	
	TIME	2	650	10.06	**
	OCC	4	325	4.84	**
	DAY × OCC	8	647	2.98	**
	TIME × OCC	8	650	0.82	
RELAXATION / OCCUPATION					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	646	1.00	
	TIME	2	648	6.31	**
	OCC	4	324	5.48	**
	DAY × OCC	8	646	2.18	*
	TIME × OCC	8	648	2.42	*

NDF= numerator degrees of freedom; DDF= denominator degrees of freedom; DAY= sampling day; TIME= sampling time (t(+0) to t(20:00)); OCC = occupational groups (nurses, teachers, hotel staff, social service assistants, mixed group); mixed models for repeated measures: *p<0.05; ** p<0.01

Table 81: Effect of shift work on diurnal profiles of mood and well-being (study 2)

Dependent variable / group	Effect	NDF	DDF	F	p
MOOD / SHIFT WORK					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	640	0.16	
	TIME	1	642	19.91	**
	SHIFT	1	322	12.62	**
	DAY × SHIFT	2	640	1.19	
	TIME × SHIFT	2	642	3.02	*
ALERTNESS / SHIFT WORK					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	641	1.99	
	TIME	1	644	19.23	**
	SHIFT	1	322	7.74	**
	DAY × SHIFT	2	641	1.28	
	TIME × SHIFT	2	644	0.35	
RELAXATION / SHIFT WORK					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	640	0.21	
	TIME	1	642	3.63	*
	SHIFT	1	321	18.32	**
	DAY × SHIFT	2	640	1.03	
	TIME × SHIFT	2	642	5.27	**

NDF= numerator degrees of freedom; DDF= denominator degrees of freedom; DAY= sampling day; TIME= sampling time (t(+0) to t(20:00)); SHIFT = shift work (yes/no); mixed models for repeated measures: *p<0.05; ** p<0.01

Table 82: Effect of somatic complaints on diurnal profiles of mood and well-being (study 2)

Dependent variable / group	Effect	NDF	DDF	F	p
MOOD / SOMATIC COMPLAINTS					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	571	0.71	
	TIME	2	572	28.50	**
	GBBB	1	287	41.07	**
	DAY × GBBB	2	571	0.46	
	TIME × GBBB	2	572	3.93	*
ALERTNESS / SOMATIC COMPLAINTS					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	572	2.06	
	TIME	2	574	22.17	**
	GBBB	1	287	30.59	**
	DAY × GBBB	2	572	0.36	
	TIME × GBBB	2	574	1.66	
RELAXATION / SOMATIC COMPLAINTS					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	571	0.21	
	TIME	2	572	8.56	**
	GBBB	1	286	27.29	**
	DAY × GBBB	2	571	0.51	
	TIME × GBBB	2	572	5.20	**

NDF= numerator degrees of freedom; DDF= denominator degrees of freedom; DAY= sampling day; TIME= sampling time (t(+0) to t(20:00)); GBBB = somatic complaints (scale: *overall distress*, median-split; Braehler & Scheer, 1993); mixed models for repeated measures: *p<0.05; ** p<0.01

Table 83: Effect of depressive symptoms on diurnal profiles of mood and well-being (study 2)

Dependent variable / group	Effect	NDF	DDF	F	p
MOOD / DEPRESSIVE SYMPTOMS					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	613	0.69	
	TIME	2	614	22.43	**
	ADS	1	308	58.14	**
	DAY × ADS	2	613	0.30	
	TIME × ADS	2	614	3.81	*
ALERTNESS / DEPRESSIVE SYMPTOMS					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	614	3.63	*
	TIME	2	616	20.71	**
	ADS	1	308	46.85	**
	DAY × ADS	2	614	1.22	
	TIME × ADS	2	616	0.45	
RELAXATION / DEPRESSIVE SYMPTOMS					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	613	0.43	
	TIME	2	614	9.13	**
	ADS	1	307	86.45	**
	DAY × ADS	2	613	5.50	**
	TIME × ADS	2	614	2.52	

NDF= numerator degrees of freedom; DDF= denominator degrees of freedom; DAY= sampling day; TIME= sampling time (t(+0) to t(20:00)); ADS = depressive symptoms (median-split; CES-D, Hautzinger & Bailer, 1995); mixed models for repeated measures: *p<0.05; ** p<0.01

Table 84: Effect of trait anxiety on diurnal profiles of mood and well-being (study 2)

Dependent variable / group	Effect	NDF	DDF	F	p
MOOD / TRAIT ANXIETY					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	646	0.68	
	TIME	2	648	27.26	**
	STAI-T	1	325	96.22	**
	DAY × STAI-T	2	646	0.22	
	TIME × STAI-T	2	648	1.32	
ALERTNESS / TRAIT ANXIETY					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	647	2.97	
	TIME	2	650	22.48	**
	STAI-T	1	325	77.89	**
	DAY × STAI-T	2	647	0.44	
	TIME × STAI-T	2	650	0.14	
RELAXATION / TRAIT ANXIETY					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	646	0.43	
	TIME	2	648	9.79	**
	STAI-T	1	324	100.93	**
	DAY × STAI-T	2	646	0.73	
	TIME × STAI-T	2	648	3.62	*

NDF= numerator degrees of freedom; DDF= denominator degrees of freedom; DAY= sampling day; TIME= sampling time (t(+0) to t(20:00)); STAI-T = trait anxiety (median-split; Laux et al., 1981); mixed models for repeated measures: *p<0.05; ** p<0.01

Table 85: Effect of emotional exhaustion on diurnal profiles of mood and well-being (study 2)

Dependent variable / group	Effect	NDF	DDF	F	p
MOOD / EMOTIONAL EXHAUSTION					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	565	2.59	
	TIME	2	566	23.80	**
	EE	1	284	67.11	**
	DAY × EE	2	565	1.47	
	TIME × EE	2	566	1.31	
ALERTNESS / EMOTIONAL EXHAUSTION					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	566	2.13	
	TIME	2	568	21.45	**
	EE	1	284	75.18	**
	DAY × EE	2	566	0.10	
	TIME × EE	2	568	0.68	
RELAXATION / EMOTIONAL EXHAUSTION					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	565	0.53	
	TIME	2	566	8.39	**
	EE	1	283	39.14	**
	DAY × EE	2	565	0.55	
	TIME × EE	2	566	3.10	*

NDF= numerator degrees of freedom; DDF= denominator degrees of freedom; DAY= sampling day; TIME= sampling time (t(+0) to t(20:00)); EE = burnout: scale *emotional exhaustion* (MBI, Enzmann & Kleiber, 1989); mixed models for repeated measures: *p<0.05; ** p<0.01

Table 86: Effect of depersonalization on diurnal profiles of mood and well-being (study 2)

Dependent variable / group	Effect	NDF	DDF	F	p
MOOD / DEPERSONALIZATION					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	578	1.34	
	TIME	2	580	25.84	**
	DP	1	291	2.57	
	DAY × DP	2	578	7.32	**
	TIME × DP	2	580	1.74	
ALERTNESS / DEPERSONALIZATION					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	579	4.41	*
	TIME	2	582	19.65	**
	DP	1	291	1.67	
	DAY × DP	2	579	5.91	**
	TIME × DP	2	582	1.33	
RELAXATION / DEPERSONALIZATION					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	578	0.41	
	TIME	2	580	10.64	**
	DP	1	290	3.24	
	DAY × DP	2	578	0.56	
	TIME × DP	2	580	1.73	

NDF= numerator degrees of freedom; DDF= denominator degrees of freedom; DAY= sampling day; TIME= sampling time (t(+0) to t(20:00)); DP = burnout: scale *depersonalization* (MBI, Enzmann & Kleiber, 1989); mixed models for repeated measures: *p<0.05; ** p<0.01

Table 87: Effect of personal accomplishment on diurnal profiles of mood and well-being (study 2)

Dependent variable / group	Effect	NDF	DDF	F	p
MOOD / PERSONAL ACCOMPLISHMENT					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	571	3.93	*
	TIME	2	572	19.56	**
	PA	1	287	28.50	**
	DAY × PA	2	571	1.46	
	TIME × PA	2	572	0.62	
ALERTNESS / PERSONAL ACCOMPLISHMENT					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	572	3.51	*
	TIME	2	574	21.92	**
	PA	1	287	13.30	**
	DAY × PA	2	572	2.41	
	TIME × PA	2	574	1.42	
RELAXATION / PERSONAL ACCOMPLISHMENT					
Single samples: t(+30), t(16:00), t(20:00)	DAY	2	571	1.47	
	TIME	2	572	8.03	**
	PA	1	286	12.40	**
	DAY × PA	2	571	2.50	
	TIME × PA	2	572	0.73	

NDF= numerator degrees of freedom; DDF= denominator degrees of freedom; DAY= sampling day; TIME= sampling time (t(+0) to t(20:00)); PA = burnout: scale *reduced personal accomplishment* (MBI, Enzmann & Kleiber, 1989); mixed models for repeated measures: *p<0.05; ** p<0.01

Table 88: Descriptive statistics of average diurnal psychological strain (study 1)

	Day 1		Day 2	
	N	MW ± SD	N	MW ± SD
Psychological strain	92	3.02 ± 0.71	90	3.15 ± 0.79

Psychological strain: diurnal mean (KAB, Mueller & Basler, 1993)

Table 89: Descriptive statistics of average diurnal psychological strain by subgroups (study 1)

Psychological strain	Day 1		Day 2	
	N	MW \pm SD	N	MW \pm SD
Gender				
Men	21	3.09 \pm 0.67	20	3.24 \pm 0.86
Women	71	3.00 \pm 0.73	70	3.13 \pm 0.77
Occupational groups				
Nurses	42	2.92 \pm 0.67	42	3.10 \pm 0.82
Teachers	21	3.08 \pm 0.66	20	3.10 \pm 0.74
Hotel staff	8	2.92 \pm 0.67	8	3.11 \pm 0.55
Social service	21	3.20 \pm 0.86	20	3.34 \pm 0.87
Shift work				
Yes	38	2.96 \pm 0.63	39	3.19 \pm 0.65
No	41	3.05 \pm 0.80	39	3.20 \pm 0.91

Psychological strain: diurnal mean (KAB, Mueller & Basler, 1993)

Table 90: Descriptive statistics of average diurnal psychological strain by somatic and psychological distress (study 1)

Psychological strain	Day 1		Day 2	
	N	MW \pm SD	N	MW \pm SD
Somatic complaints				
High	43	3.20 \pm 0.73	42	3.44 \pm 0.82
Low	43	2.87 \pm 0.68	43	2.92 \pm 0.70
Depressive symptoms				
High	42	3.32 \pm 0.79	39	3.53 \pm 0.80
Low	42	2.74 \pm 0.52	43	2.83 \pm 0.67
Trait anxiety				
High	45	3.33 \pm 0.74	42	3.51 \pm 0.75
Low	43	2.69 \pm 0.54	44	2.77 \pm 0.66
Emotional exhaustion				
High	43	3.22 \pm 0.73	41	3.43 \pm 0.82
Low	41	2.80 \pm 0.66	41	2.85 \pm 0.66
Depersonalization				
High	52	3.19 \pm 0.77	49	3.38 \pm 0.79
Low	35	2.80 \pm 0.56	36	2.88 \pm 0.56
Personal accomplishment				
High	45	3.26 \pm 0.75	42	3.39 \pm 0.76
Low	42	2.79 \pm 0.60	43	2.94 \pm 0.77

Psychological strain: diurnal mean (KAB, Mueller & Basler, 1993); somatic complaints: low/high (median split; Braehler & Scheer, 1995); depressive symptoms: low/high (median split; Hautzinger & Bailer, 1995); trait anxiety: low/high (median split; Laux et al., 1981); emotional exhaustion / depersonalization / personal accomplishment: low/high (median split; MBI, Enzmann & Kleiber, 1989);

Table 91: Intercorrelation of mood scales (study 2)

	1	2
DAY 1+2+3		
1 good mood ¹	--	
2 alertness ²	.65**	--
3 relaxation ³	.60**	.50**
DAY 1		
1 good mood ¹	--	
2 alertness ²	.64**	--
3 relaxation ³	.60**	.53**
DAY 2		
1 good mood ¹	--	
2 alertness ²	.67**	--
3 relaxation ³	.58**	.46**
DAY 3		
1 good mood ¹	--	
2 alertness ²	.66**	--
3 relaxation ³	.61**	.50**

Pearson correlation coefficients; * p< 0.05; **p< 0.01; ¹diurnal mean of *good vs. bad mood* (NRS: 0-10; Steyer et al., 1997); ²diurnal mean of *alertness vs. tiredness* (NRS: 0-10; Steyer et al., 1997); ³diurnal mean of *relaxation vs. agitation* (NRS: 0-10; Steyer et al., 1997).

Table 92: Descriptive statistics of average diurnal mood (study 2)

	Day 1		Day 2		Day 3	
	N	MW ± SD	N	MW ± SD	N	MW ± SD
Average diurnal mood	330	6.61 ± 1.55	329	6.23 ± 1.58	328	6.15 ± 1.68

Average diurnal mood: mean score calculated from average levels of good mood, alertness, and relaxation (Steyer et al., 1997)

Table 93: Descriptive statistics of average diurnal mood by subgroups (study 2)

Average diurnal mood	Day 1		Day 2		Day 3	
	N	MW \pm SD	N	MW \pm SD	N	MW \pm SD
Gender						
Men	106	6.35 \pm 1.43	106	6.28 \pm 1.50	106	6.15 \pm 1.70
Women	224	6.07 \pm 1.60	223	6.21 \pm 1.62	222	6.15 \pm 1.67
Occupational groups						
Nurses	81	6.70 \pm 1.45	81	6.53 \pm 1.44	80	6.55 \pm 1.59
Teachers	108	5.62 \pm 1.42	107	5.88 \pm 1.49	107	5.95 \pm 1.48
Hotel staff	17	6.56 \pm 2.12	17	6.98 \pm 2.00	17	7.19 \pm 1.49
Social service	89	6.03 \pm 1.58	89	6.15 \pm 1.68	89	5.82 \pm 1.87
Mixed group	35	6.67 \pm 1.20	35	6.47 \pm 1.43	35	6.15 \pm 1.73
Shift work						
Yes	85	6.72 \pm 1.35	85	6.63 \pm 1.45	84	6.70 \pm 1.55
No	239	5.95 \pm 1.55	238	6.06 \pm 1.59	238	5.91 \pm 1.67

Average diurnal mood: mean score calculated from average levels of good mood, alertness, and relaxation (Steyer et al., 1997).

Table 94: Descriptive statistics of average diurnal mood by somatic and psychological distress (study 2)

BEF_MW	Day 1		Day 2		Day 3	
	N	MW \pm SD	N	MW \pm SD	N	MW \pm SD
Somatic complaints						
High	148	5.74 \pm 1.46	147	5.75 \pm 1.43	147	5.71 \pm 1.61
Low	141	6.74 \pm 1.40	141	6.80 \pm 1.50	141	6.72 \pm 1.49
Depressive symptoms						
High	166	5.60 \pm 1.52	165	5.56 \pm 1.44	165	5.46 \pm 1.65
Low	144	6.77 \pm 1.38	144	6.97 \pm 1.38	144	6.90 \pm 1.39
Trait anxiety						
High	163	5.43 \pm 1.44	162	5.45 \pm 1.40	162	5.38 \pm 1.57
Low	164	6.88 \pm 1.32	164	7.01 \pm 1.36	163	6.94 \pm 1.41
Emotional exhaustion						
High	157	5.49 \pm 1.51	156	5.64 \pm 1.53	156	5.52 \pm 1.67
Low	129	6.86 \pm 1.31	129	6.93 \pm 1.37	129	6.92 \pm 1.41
Depersonalization						
High	110	6.00 \pm 1.56	110	6.08 \pm 1.58	109	5.78 \pm 1.80
Low	183	6.15 \pm 1.58	182	6.29 \pm 1.61	182	6.36 \pm 1.64
Personal accomplishment						
High	197	5.89 \pm 1.52	196	5.92 \pm 1.57	196	5.85 \pm 1.79
Low	92	6.53 \pm 1.63	92	6.86 \pm 1.43	92	6.77 \pm 1.37

Average diurnal mood: mean score calculated from average levels of good mood, alertness, and relaxation (Steyer et al., 1997); somatic complaints: low/high (median split; Braehler & Scheer, 1995); depressive symptoms: low/high (median split; Hautzinger & Bailer, 1995); trait anxiety: low/high (median split; Laux et al., 1981); emotional exhaustion / depersonalization / personal accomplishment: low/high (median split; MBI, Enzmann & Kleiber, 1989).

Table 95: Association of average diurnal strain and cortisol parameters (study 1)

	Psychological strain ⁺					
	Day 1+2		Day 1		Day 2	
	N	r ⁺	N	r	N	r
Cortisol awakening rise	172	.18*	86	.07	86	.28**
Total morning cortisol release	177	.23**	88	.14	89	.31**
Total diurnal cortisol release						
Mean [with t(+30)]	164	.24**	83	.14	81	.33**
Mean [without t(+30)]	164	.25**	83	.20	81	.30**
AUC [with t(+30)]	164	.23**	83	.18	81	.32**
AUC [without t(+30)]	164	.25**	83	.22*	81	.29**
Diurnal cortisol decline						
Slope [without t(+0)]	164	-.16*	83	-.05	81	-.28*
Slope [without t(+30)]	164	-.14	83	-.09	81	-.21
Delta [t(+30) – t(20:00)]	156	.18*	79	.09	77	.28*
Delta [t(+0) – t(20:00)]	158	.15	81	.13	77	.17

Pearson correlation coefficients; * p< 0.05; **p< 0.01; ⁺psychological strain: diurnal mean (KAB; Mueller & Basler, 1993).

Table 96: Association of average diurnal strain and cortisol parameters by gender (study 1)

	Psychological strain ⁺					
	Day 1+2		Day 1		Day 2	
	N	r ⁺	N	r	N	r
MEN						
Cortisol awakening rise	35	.08	19	-.17	16	.28
Total morning cortisol release	39	.10	20	.03	19	.14
Total diurnal cortisol release						
Mean [with t(+30)]	37	.16	20	.08	17	.22
Mean [without t(+30)]	37	.11	20	.09	17	.12
AUC [with t(+30)]	37	.08	20	-.08	17	.28
AUC [without t(+30)]	37	.02	20	-.07	17	.15
Diurnal cortisol decline						
Slope [without t(+0)]	37	-.02	20	.14	17	-.22
Slope [without t(+30)]	37	.04	20	.04	17	.03
Delta [t(+30) – t(20:00)]	34	.16	17	.03	17	.25
Delta [t(+0) – t(20:00)]	35	.10	18	.17	17	.04
WOMEN						
Cortisol awakening rise	137	.20*	67	.13	70	.28*
Total morning cortisol release	138	.26**	68	.17	70	.36**
Total diurnal cortisol release						
Mean [with t(+30)]	127	.26**	63	.15	64	.37**
Mean [without t(+30)]	127	.29**	63	.22	64	.35**
AUC [with t(+30)]	127	.27**	63	.23	64	.35**
AUC [without t(+30)]	127	.30**	63	.28*	64	.34**
Diurnal cortisol decline						
Slope [without t(+0)]	127	-.20*	63	-.11	64	-.30*
Slope [without t(+30)]	127	-.21*	63	-.15	64	-.29*
Delta [t(+30) – t(20:00)]	122	.18*	62	.10	60	.30*
Delta [t(+0) – t(20:00)]	123	.16	63	.12	60	.23

Pearson correlation coefficients; * p< 0.05; **p< 0.01; ⁺psychological strain: diurnal mean (KAB; Mueller & Basler, 1993).

Table 97: Association of average diurnal strain and cortisol parameters by occupational group (study 1)

	Psychological strain ⁺					
	Day 1+2		Day 1		Day 2	
	N	r ⁺	N	r	N	r
NURSES						
Cortisol awakening rise	80	.28*	39	.17	41	.42*
Total morning cortisol release	83	.26*	41	.12	42	.39*
Total diurnal cortisol release						
Mean [with t(+30)]	73	.16	36	-.07	37	.38*
Mean [without t(+30)]	73	.16	36	-.03	37	.35*
AUC [with t(+30)]	73	.18	36	.04	37	.37*
AUC [without t(+30)]	73	.21	36	.08	37	.36*
Diurnal cortisol decline						
Slope [without t(+0)]	73	-.09	36	.08	37	-.25
Slope [without t(+30)]	73	-.10	36	.08	37	-.30
Delta [t(+30) – t(20:00)]	69	.15	34	-.01	35	.40*
Delta [t(+0) – t(20:00)]	71	.16	36	.01	35	.31
TEACHERS						
Cortisol awakening rise	41	.09	21	.03	20	.15
Total morning cortisol release	41	.35*	21	.46*	20	.25
Total diurnal cortisol release						
Mean [with t(+30)]	40	.44**	21	.46*	19	.42
Mean [without t(+30)]	40	.35*	21	.44*	19	.27
AUC [with t(+30)]	40	.18	21	.13	19	.28
AUC [without t(+30)]	40	.15	21	.08	19	.23
Diurnal cortisol decline						
Slope [without t(+0)]	40	-.29	21	-.26	19	-.34
Slope [without t(+30)]	40	-.24	21	-.42	19	-.04
Delta [t(+30) – t(20:00)]	40	.24	21	.25	19	.23
Delta [t(+0) – t(20:00)]	40	.21	21	.39	19	.01
HOTEL STAFF						
Cortisol awakening rise	12	.05	6	-.41	6	.87*
Total morning cortisol release	13	.00	6	-.52	7	.39
Total diurnal cortisol release						
Mean [with t(+30)]	12	.24	6	.08	6	.42
Mean [without t(+30)]	12	.39	6	.40	6	.35
AUC [with t(+30)]	12	.59*	6	.53	6	.77
AUC [without t(+30)]	12	.57	6	.53	6	.70
Diurnal cortisol decline						
Slope [without t(+0)]	12	.09	6	.60	6	-.63
Slope [without t(+30)]	12	.02	6	.50	6	-.62
Delta [t(+30) – t(20:00)]	10	.10	5	-.44	5	.45
Delta [t(+0) – t(20:00)]	9	.07	5	-.60	4	.43

Pearson correlation coefficients; * p< 0.05; **p< 0.01; ⁺psychological strain: diurnal mean (KAB; Mueller & Basler, 1993).

Table 97 (continued)

	Psychological strain ⁺					
	Day 1+2		Day 1		Day 2	
	N	r ⁺	N	r	N	r
SOCIAL SERVICE						
Cortisol awakening rise	39	.09	20	-.03	19	.25
Total morning cortisol release	40	.07	20	-.29	20	.38
Total diurnal cortisol release						
Mean [with t(+30)]	39	.22	20	.01	19	.48*
Mean [without t(+30)]	39	.24	20	.18	19	.35
AUC [with t(+30)]	39	.19	20	.20	19	.34
AUC [without t(+30)]	39	.24	20	.30	19	.18
Diurnal cortisol decline						
Slope [without t(+0)]	39	-.15	20	.02	19	-.48*
Slope [without t(+30)]	39	-.09	20	-.05	19	-.19
Delta [t(+30) – t(20:00)]	37	.08	19	-.22	18	.41
Delta [t(+0) – t(20:00)]	38	-.01	19	-.12	19	.12

Pearson correlation coefficients; * p< 0.05; **p< 0.01; ⁺psychological strain: diurnal mean (KAB; Mueller & Basler, 1993).

Table 98: Association of average diurnal strain and cortisol parameters by shift work (study 1)

	Psychological strain ⁺					
	Day 1+2		Day 1		Day 2	
	N	r ⁺	N	r	N	r
NO SHIFT WORK						
Cortisol awakening rise	73	.04	36	-.03	37	.16
Total morning cortisol release	76	.09	37	-.07	39	.22
Total diurnal cortisol release						
Mean [with t(+30)]	70	.08	34	-.09	36	.26
Mean [without t(+30)]	70	.09	34	-.06	36	.26
AUC [with t(+30)]	70	.11	34	.03	36	.28
AUC [without t(+30)]	70	.15	34	.08	36	.28
Diurnal cortisol decline						
Slope [without t(+0)]	70	-.06	34	.11	36	-.23
Slope [without t(+30)]	70	-.13	34	.10	36	-.41*
Delta [t(+30) – t(20:00)]	67	.13	32	-.04	35	.37*
Delta [t(+0) – t(20:00)]	67	.17	33	.03	34	.33
SHIFT WORK						
Cortisol awakening rise	74	.29*	37	.15	37	.40*
Total morning cortisol release	76	.40**	38	.27	38	.50**
Total diurnal cortisol release						
Mean [with t(+30)]	70	.42**	36	.25	34	.54**
Mean [without t(+30)]	70	.38**	36	.31	34	.45**
AUC [with t(+30)]	70	.35**	36	.26	34	.48**
AUC [without t(+30)]	70	.33**	36	.27	34	.39*
Diurnal cortisol decline						
Slope [without t(+0)]	70	-.26*	36	-.10	34	-.44**
Slope [without t(+30)]	70	-.15	36	-.12	34	-.18
Delta [t(+30) – t(20:00)]	64	.27*	34	.18	30	.38*
Delta [t(+0) – t(20:00)]	66	.14	35	.19	31	.04

Pearson correlation coefficients; * p< 0.05; **p< 0.01; ⁺psychological strain: diurnal mean (KAB; Mueller & Basler, 1993).

Table 99: Association of average diurnal mood and cortisol parameters (study 2)

	Average diurnal mood ⁺							
	Day 1+2+3		Day 1		Day 2		Day 3	
	N	r ⁺	N	r	N	r	N	r
Cortisol awakening rise	920	.04	306	.02	308	.06	306	.06
Total morning cortisol release	952	-.01	315	-.02	319	.00	318	-.01
Total diurnal cortisol release								
Mean [with t(+30)]	958	-.02	319	-.04	318	.05	321	-.06
Mean [without t(+30)]	958	-.03	319	-.05	318	.06	321	-.10
AUC [with t(+30)]	958	.05	319	.00	318	.09	321	.05
AUC [without t(+30)]	937	-.04	310	-.06	315	.05	312	-.11*
Diurnal cortisol decline								
Slope [without t(+0)]	958	-.01	319	.00	318	-.05	321	.02
Slope [without t(+30)]	958	.04	319	.03	318	.03	321	.07
Delta [t(+30) – t(20:00)]	884	.00	296	.00	291	.02	297	-.01
Delta [t(+0) – t(20:00)]	892	-.07*	297	-.06	294	-.06	301	-.08

Pearson correlation coefficients; * p< 0.05; **p< 0.01; ⁺average diurnal mood: mean score calculated from average levels of good mood, alertness, and relaxation (Steyer et al., 1997).

Table 100: Association of average diurnal mood and cortisol parameters by gender (study 2)

	Average diurnal mood ⁺							
	Day 1+2+3		Day 1		Day 2		Day 3	
	N	r ⁺	N	r	N	r	N	r
MEN								
Cortisol awakening rise	295	-.02	99	-.01	97	-.07	99	.02
Total morning cortisol release	303	.03	100	-.01	101	.01	102	.08
Total diurnal cortisol release								
Mean [with t(+30)]	307	.00	100	-.08	104	.06	103	.01
Mean [without t(+30)]	307	.05	100	-.05	104	.19	103	-.01
AUC [with t(+30)]	307	-.03	100	-.05	104	-.08	103	.02
AUC [without t(+30)]	304	.00	99	-.08	102	.13	103	-.07
Diurnal cortisol decline								
Slope [without t(+0)]	307	-.01	100	.04	104	.03	103	-.10
Slope [without t(+30)]	307	-.05	100	.01	104	-.06	103	-.12
Delta [t(+30) – t(20:00)]	289	.01	93	.02	96	-.05	100	.06
Delta [t(+0) – t(20:00)]	288	.03	91	-.05	97	.06	100	.08
WOMEN								
Cortisol awakening rise	625	.08*	207	.04	211	.13	207	.08
Total morning cortisol release	649	-.03	215	-.01	218	-.02	216	-.07
Total diurnal cortisol release								
Mean [with t(+30)]	651	-.03	219	-.02	214	.05	218	-.09
Mean [without t(+30)]	651	-.08*	219	-.07	214	-.01	218	-.15*
AUC [with t(+30)]	651	.08*	219	.01	214	.20**	218	.07
AUC [without t(+30)]	633	-.07	211	-.07	213	.00	209	-.14*
Diurnal cortisol decline								
Slope [without t(+0)]	651	-.01	219	-.02	214	-.09	218	.07
Slope [without t(+30)]	651	.10*	219	.05	214	.09	218	.16*
Delta [t(+30) – t(20:00)]	595	.00	203	.00	195	.07	197	-.04
Delta [t(+0) – t(20:00)]	604	-.13**	206	-.08	197	-.14	201	-.16*

Pearson correlation coefficients; * p< 0.05; **p< 0.01; ⁺average diurnal mood: mean score calculated from average levels of good mood, alertness, and relaxation (Steyer et al., 1997).

Table 101: Association of average diurnal mood and cortisol parameters by occupational group (study 2)

	Average diurnal mood ⁺							
	Day 1+2+3		Day 1		Day 2		Day 3	
	N	r ⁺	N	r	N	r	N	r
NURSES								
Cortisol awakening rise	220	.07	75	.03	74	.13	71	.05
Total morning cortisol release	228	.06	76	-.02	77	.13	75	.10
Total diurnal cortisol release								
Mean [with t(+30)]	232	.00	76	-.08	78	.13	78	-.04
Mean [without t(+30)]	232	-.06	76	-.12	78	.06	78	-.10
AUC [with t(+30)]	232	.00	76	-.05	78	-.01	78	.06
AUC [without t(+30)]	227	-.05	73	-.07	77	.06	77	-.11
Diurnal cortisol decline								
Slope [without t(+0)]	232	-.04	76	-.01	78	-.15	78	.01
Slope [without t(+30)]	232	-.01	76	.05	78	-.03	78	-.06
Delta [t(+30) – t(20:00)]	217	.06	76	.01	72	.14	69	.04
Delta [t(+0) – t(20:00)]	218	.00	76	-.07	72	.02	70	.06
TEACHERS								
Cortisol awakening rise	303	.09	100	.05	102	.06	101	.16
Total morning cortisol release	314	-.06	105	-.08	104	-.10	105	-.01
Total diurnal cortisol release								
Mean [with t(+30)]	312	-.09	106	-.19	102	-.03	104	-.05
Mean [without t(+30)]	312	-.18**	106	-.29**	102	-.04	104	-.18
AUC [with t(+30)]	312	.04	106	-.01	102	.13	104	.02
AUC [without t(+30)]	302	-.18**	102	-.29**	100	-.03	100	-.21*
Diurnal cortisol decline								
Slope [without t(+0)]	312	-.01	106	.00	102	.04	104	-.07
Slope [without t(+30)]	312	.08	106	.04	102	.09	104	.10
Delta [t(+30) – t(20:00)]	281	.02	94	-.06	90	.00	97	.10
Delta [t(+0) – t(20:00)]	286	-.11	98	-.06	90	-.11	98	-.16
HOTEL STAFF								
Cortisol awakening rise	50	-.28*	17	-.23	17	-.31	16	-.27
Total morning cortisol release	50	-.14	17	-.25	17	-.08	16	.02
Total diurnal cortisol release								
Mean [with t(+30)]	51	.00	17	-.14	17	.10	17	.13
Mean [without t(+30)]	51	.25	17	.22	17	.35	17	.21
AUC [with t(+30)]	51	.05	17	-.15	17	.07	17	.29
AUC [without t(+30)]	50	.26	17	.21	17	.38	16	.29
Diurnal cortisol decline								
Slope [without t(+0)]	51	.25	17	.32	17	.16	17	.14
Slope [without t(+30)]	51	.09	17	.27	17	.09	17	-.13
Delta [t(+30) – t(20:00)]	51	-.31*	17	-.34	17	-.29	17	-.19
Delta [t(+0) – t(20:00)]	50	-.10	17	-.27	17	-.08	16	.10

Pearson correlation coefficients; * p< 0.05; **p< 0.01; ⁺average diurnal mood: mean score calculated from average levels of good mood, alertness, and relaxation (Steyer et al., 1997).

Table 101: (continued)

	Average diurnal mood ⁺							
	Day 1+2+3		Day 1		Day 2		Day 3	
	N	r ⁺	N	r	N	r	N	r
SOCIAL SERVICE								
Cortisol awakening rise	250	-.01	82	-.05	83	-.01	85	.03
Total morning cortisol release	262	-.05	84	.10	89	-.10	89	-.14
Total diurnal cortisol release								
Mean [with t(+30)]	264	-.02	88	.13	87	-.01	89	-.15
Mean [without t(+30)]	264	.01	88	.20	87	.03	89	-.15
AUC [with t(+30)]	264	.03	88	-.03	87	.04	89	.05
AUC [without t(+30)]	259	-.01	86	.12	87	.02	86	-.18
Diurnal cortisol decline								
Slope [without t(+0)]	264	-.03	88	-.05	87	-.09	89	.07
Slope [without t(+30)]	264	.00	88	-.15	87	.00	89	.14
Delta [t(+30) – t(20:00)]	241	-.02	80	.09	79	-.05	82	-.11
Delta [t(+0) – t(20:00)]	248	-.04	78	.08	84	-.07	86	-.09
MIXED GROUP								
Cortisol awakening rise	97	-.01	32	-.17	32	.12	33	-.06
Total morning cortisol release	98	.15	33	.14	32	.31	33	.07
Total diurnal cortisol release								
Mean [with t(+30)]	99	.10	32	-.02	34	.25	33	.06
Mean [without t(+30)]	99	.13	32	.08	34	.21	33	.10
AUC [with t(+30)]	99	.04	32	-.06	34	.26	33	-.06
AUC [without t(+30)]	99	.07	32	-.06	34	.16	33	.11
Diurnal cortisol decline								
Slope [without t(+0)]	99	-.02	32	.06	34	-.24	33	.13
Slope [without t(+30)]	99	-.03	32	-.11	34	-.12	33	.12
Delta [t(+30) – t(20:00)]	94	.02	29	.00	33	.22	32	-.14
Delta [t(+0) – t(20:00)]	90	.05	28	.20	31	.13	31	-.14

Pearson correlation coefficients; * p< 0.05; **p< 0.01; ⁺average diurnal mood: mean score calculated from average levels of good mood, alertness, and relaxation (Steyer et al., 1997).

Table 102: Association of average diurnal mood and cortisol parameters by shift work (study 2)

	Average diurnal mood ⁺							
	Day 1+2+3		Day 1		Day 2		Day 3	
	N	r ⁺	N	r	N	r	N	r
NO SHIFT WORK								
Cortisol awakening rise	674	.02	224	-.07	224	.02	226	.10
Total morning cortisol release	698	-.03	232	.01	232	-.05	234	-.05
Total diurnal cortisol release								
Mean [with t(+30)]	699	-.02	235	.00	231	.02	233	-.08
Mean [without t(+30)]	699	-.02	235	.04	231	.06	233	-.15*
AUC [with t(+30)]	699	.05	235	-.01	231	.08	233	.06
AUC [without t(+30)]	682	-.04	229	.00	228	.05	225	-.16*
Diurnal cortisol decline								
Slope [without t(+0)]	699	.00	235	.01	231	-.02	233	.01
Slope [without t(+30)]	699	.04	235	-.07	231	.03	233	.16*
Delta [t(+30) – t(20:00)]	641	-.02	213	-.04	210	-.02	218	-.01
Delta [t(+0) – t(20:00)]	651	-.06	215	.03	214	-.07	222	-.13
SHIFT WORK								
Cortisol awakening rise	229	.04	77	.10	78	.12	74	-.08
Total morning cortisol release	237	.05	78	-.02	81	.12	78	.04
Total diurnal cortisol release								
Mean [with t(+30)]	242	.00	79	-.10	81	.16	82	-.04
Mean [without t(+30)]	242	-.04	79	-.21	81	.10	82	-.03
AUC [with t(+30)]	242	.00	79	-.01	81	.08	82	-.04
AUC [without t(+30)]	238	-.03	76	-.16	81	.09	81	-.04
Diurnal cortisol decline								
Slope [without t(+0)]	242	-.02	79	-.01	81	-.13	82	.07
Slope [without t(+30)]	242	.01	79	.16	81	.00	82	-.07
Delta [t(+30) – t(20:00)]	229	.03	79	.02	76	.12	74	-.04
Delta [t(+0) – t(20:00)]	227	-.02	78	-.17	75	-.01	74	.07

Pearson correlation coefficients; * p< 0.05; **p< 0.01; ⁺average diurnal mood: mean score calculated from average levels of good mood, alertness, and relaxation (Steyer et al., 1997).

Table 103: Stability of cortisol single samples (intraclass correlation coefficients)

Cortisol at	Study 1		Study 2	
	Sample		Sample	
t(+0)	0.588 [0.445, 0.701]		0.470 [0.406, 0.534]	
t(+30)	0.689 [0.572, 0.779]		0.366 [0.297, 0.434]	
t(08:00)	0.624 [0.486, 0.732]		--	
t(11:00)	0.548 [0.395, 0.672]		--	
t(15:00) [#]	0.681 [0.560, 0.774]		0.272 [0.203, 0.342]	
t(20:00)	0.327 [0.139, 0.493]		0.317 [0.248, 0.387]	
	Men	Women	Men	Women
t(+0)	0.456 [0.060, 0.730]	0.626 [0.473, 0.743]	0.394 [0.275, 0.512]	0.502 [0.425, 0.576]
t(+30)	0.582 [0.226, 0.800]	0.711 [0.584, 0.805]	0.360 [0.239, 0.482]	0.368 [0.285, 0.451]
t(08:00)	0.630 [0.300, 0.827]	0.614 [0.452, 0.737]	--	--
t(11:00)	0.469 [0.077, 0.738]	0.538 [0.359, 0.679]	--	--
t(15:00) [#]	0.718 [0.431, 0.875]	0.652 [0.505, 0.763]	0.241 [0.121, 0.368]	0.279 [0.196, 0.365]
t(20:00)	0.288 [-0.145, 0.632]	0.326 [0.113, 0.512]	0.387 [0.268, 0.506]	0.281 [0.197, 0.367]
	Shift / yes	Shift / no	Shift / yes	Shift / no
t(+0)	0.518 [0.270, 0.702]	0.524 [0.271, 0.710]	0.515 [0.391, 0.632]	0.443 [0.365, 0.519]
t(+30)	0.664 [0.464, 0.800]	0.676 [0.475, 0.810]	0.364 [0.231, 0.498]	0.362 [0.282, 0.443]
t(08:00)	0.678 [0.473, 0.814]	0.588 [0.354, 0.753]	--	--
t(11:00)	0.451 [0.184, 0.657]	0.576 [0.332, 0.749]	--	--
t(15:00) [#]	0.629 [0.410, 0.780]	0.692 [0.499, 0.820]	0.254 [0.121, 0.395]	0.279 [0.198, 0.363]
t(20:00)	0.428 [0.149, 0.645]	0.157 [-0.149, 0.436]	0.391 [0.258, 0.522]	0.284 [0.203, 0.367]
	Current smoker	Non-smoker	Current smoker	Non-smoker
t(+0)	0.519 [0.246, 0.717]	0.587 [0.397, 0.730]	0.508 [0.390, 0.619]	0.482 [0.402, 0.559]
t(+30)	0.690 [0.481, 0.826]	0.685 [0.525, 0.798]	0.403 [0.276, 0.528]	0.367 [0.283, 0.452]
t(08:00)	0.727 [0.528, 0.850]	0.533 [0.324, 0.693]	--	--
t(11:00)	0.466 [0.165, 0.688]	0.581 [0.388, 0.725]	--	--
t(15:00) [#]	0.645 [0.408, 0.801]	0.648 [0.474, 0.773]	0.277 [0.150, 0.411]	0.250 [0.165, 0.339]
t(20:00)	0.148 [-0.182, 0.450]	0.441 [0.212, 0.625]	0.362 [0.235, 0.491]	0.273 [0.188, 0.361]

Intraclass correlation coefficients with [95% confidence interval] according to Shrout & Fleiss, 1979; ICC (1,1); [#]in study 2: t(16:00).

Table 104: Stability of cortisol single samples (intraclass correlation coefficients) – occupational groups

	Nurses	Teachers	Hotel staff	Social service	Mixed group
Study 1					
t(+0)	0.501 [0.260, 0.683]	0.307 [-0.125, 0.644]	0.703 [0.166, 0.923]	0.355 [-0.050, 0.663]	--
t(+30)	0.685 [0.503, 0.809]	0.532 [0.150, 0.778]	0.315 [-0.365, 0.786]	0.013 [-0.388, 0.413]	--
t(08:00)	0.613 [0.394, 0.767]	0.616 [0.268, 0.823]	0.331 [-0.390, 0.814]	0.601 [0.266, 0.808]	--
t(11:00)	0.638 [0.436, 0.779]	0.475 [0.073, 0.746]	0.198 [-0.504, 0.760]	0.413 [0.007, 0.704]	--
t(15:00)	0.698 [0.520, 0.818]	0.307 [-0.137, 0.651]	0.777 [0.275, 0.950]	0.490 [0.113, 0.745]	--
t(20:00)	0.284 [0.001, 0.525]	0.385 [-0.037, 0.693]	-0.435 [-0.857, 0.383]	0.466 [0.083, 0.731]	--
Study 2					
t(+0)	0.533 [0.407, 0.649]	0.363 [0.244, 0.483]	0.439 [0.145, 0.714]	0.474 [0.348, 0.594]	0.637 [0.463, 0.779]
t(+30)	0.399 [0.263, 0.533]	0.375 [0.256, 0.494]	0.320 [0.028, 0.631]	0.333 [0.201, 0.467]	0.323 [0.113, 0.542]
t(16:00)	0.247 [0.112, 0.392]	0.237 [0.118, 0.363]	0.348 [0.054, 0.651]	0.292 [0.160, 0.429]	0.321 [0.114, 0.537]
t(20:00)	0.281 [0.144, 0.424]	0.225 [0.106, 0.353]	0.473 [0.181, 0.736]	0.289 [0.157, 0.426]	0.405 [0.198, 0.607]

Intraclass correlation coefficients with [95% confidence interval] according to Shrout & Fleiss, 1979; ICC (1,1).

Table 105: Stability of cortisol parameters reflecting the average level of diurnal cortisol output (intraclass correlation coefficients)

	Study 1		Study 2	
	Sample		Sample	
Morn. release	0.775 [0.684, 0.842]		0.497 [0.558, 0.433]	
Mean + t(+30)	0.828 [0.754, 0.881]		0.457 [0.391, 0.521]	
Mean – t(+30)	0.794 [0.708, 0.857]		0.427 [0.361, 0.493]	
AUC + t(+30)	0.677 [0.554, 0.771]		0.240 [0.171, 0.311]	
AUC – t(+30)	0.720 [0.609, 0.803]		0.329 [0.260, 0.399]	
	Men	Women	Men	Women
Morn. release	0.677 [0.373, 0.851]	0.794 [0.697, 0.863]	0.467 [0.352, 0.578]	0.514 [0.438, 0.587]
Mean + t(+30)	0.852 [0.680, 0.935]	0.824 [0.737, 0.885]	0.431 [0.312, 0.546]	0.473 [0.395, 0.549]
Mean – t(+30)	0.852 [0.681, 0.935]	0.778 [0.672, 0.853]	0.431 [0.313, 0.547]	0.419 [0.338, 0.499]
AUC + t(+30)	0.761 [0.513, 0.893]	0.663 [0.516, 0.772]	0.126 [0.012, 0.254]	0.283 [0.199, 0.369]
AUC – t(+30)	0.831 [0.641, 0.926]	0.695 [0.558, 0.795]	0.369 [0.248, 0.490]	0.304 [0.220, 0.389]
	Shift / yes	Shift / no	Shift / yes	Shift / no
Morn. release	0.783 [0.639, 0.875]	0.739 [0.568, 0.849]	0.451 [0.320, 0.576]	0.511 [0.438, 0.582]
Mean + t(+30)	0.821 [0.692, 0.899]	0.780 [0.628, 0.875]	0.362 [0.228, 0.497]	0.495 [0.420, 0.568]
Mean – t(+30)	0.727 [0.547, 0.843]	0.764 [0.604, 0.866]	0.445 [0.315, 0.571]	0.418 [0.339, 0.495]
AUC + t(+30)	0.648 [0.434, 0.794]	0.640 [0.422, 0.788]	0.187 [0.057, 0.331]	0.248 [0.167, 0.332]
AUC – t(+30)	0.680 [0.478, 0.814]	0.676 [0.473, 0.811]	0.299 [0.164, 0.439]	0.340 [0.259, 0.422]
	Current smoker	Non-smoker	Current smoker	Non-smoker
Morn. release	0.712 [0.513, 0.839]	0.812 [0.706, 0.883]	0.549 [0.435, 0.655]	0.496 [0.418, 0.572]
Mean + t(+30)	0.799 [0.642, 0.892]	0.845 [0.753, 0.905]	0.533 [0.417, 0.641]	0.461 [0.380, 0.540]
Mean – t(+30)	0.816 [0.670, 0.901]	0.757 [0.624, 0.848]	0.503 [0.383, 0.616]	0.442 [0.361, 0.523]
AUC + t(+30)	0.673 [0.449, 0.818]	0.628 [0.445, 0.760]	0.218 [0.092, 0.354]	0.261 [0.176, 0.349]
AUC – t(+30)	0.712 [0.506, 0.841]	0.658 [0.486, 0.781]	0.425 [0.300, 0.547]	0.332 [0.247, 0.418]

Intraclass correlation coefficients with [95% confidence interval] according to Shrout & Fleiss, 1979; ICC (1,1); morn.release: total morning release (arithmetic mean of t(+) and t(+30)); mean + t(+30): mean diurnal cortisol release including t(+30); mean – t(+30): mean diurnal cortisol release excluding t(+30); AUC + t(+30): AUC of all cortisol samples; AUC – t(+30): AUC of all cortisol samples excluding t(+30).

Table 106: Stability of cortisol parameters reflecting the average level of diurnal cortisol output in occupational groups (intraclass correlation coefficients)

Study 1										
Nurses		Teachers		Hotel staff		Social service		Mixed group		
Morn. release	0.719 [0.553, 0.831]	0.542 [0.162, 0.783]	0.465 [-0.200, 0.845]	0.468 [0.085, 0.732]	--					
Mean + t(+30)	0.834 [0.720, 0.904]	0.741 [0.470, 0.886]	0.231 [-0.477, 0.774]	0.465 [0.082, 0.730]	--					
Mean - t(+30)	0.820 [0.697, 0.896]	0.647 [0.315, 0.839]	0.307 [-0.412, 0.805]	0.489 [0.113, 0.745]	--					
AUC + t(+30)	0.712 [0.535, 0.829]	0.667 [0.348, 0.849]	0.055 [-0.605, 0.691]	0.282 [-0.131, 0.614]	--					
AUC - t(+30)	0.723 [0.551, 0.836]	0.687 [0.380, 0.859]	0.045 [-0.611, 0.686]	0.688 [0.399, 0.854]	--					
Study 2										
Morn. release	0.472 [0.341, 0.598]	0.477 [0.363, 0.586]	0.428 [0.133, 0.707]	0.538 [0.418, 0.648]	0.538 [0.344, 0.709]					
Mean + t(+30)	0.402 [0.266, 0.536]	0.507 [0.396, 0.612]	0.347 [0.053, 0.651]	0.494 [0.370, 0.611]	0.390 [0.180, 0.598]					
Mean - t(+30)	0.473 [0.341, 0.598]	0.369 [0.250, 0.489]	0.263 [-0.023, 0.586]	0.456 [0.329, 0.578]	0.454 [0.247, 0.649]					
AUC + t(+30)	0.154 [0.023, 0.301]	0.223 [0.105, 0.350]	0.093 [-0.158, 0.437]	0.308 [0.177, 0.444]	0.342 [0.132, 0.558]					
AUC - t(+30)	0.328 [0.191, 0.470]	0.362 [0.243, 0.482]	0.223 [-0.057, 0.554]	0.333 [0.200, 0.468]	0.214 [0.010, 0.444]					

Intraclass correlation coefficients with [95% confidence interval] according to Shrout & Fleiss, 1979; ICC (1,1); morn.release: total morning release (arithmetic mean of t(+) and t(+30)); mean + t(+30): mean diurnal cortisol release including t(+30); mean – t(+30): mean diurnal cortisol release excluding t(+30); AUC + t(+30): AUC of all cortisol samples; AUC – t(+30): AUC of all cortisol samples excluding t(+30).

Table 107: Stability of cortisol parameters reflecting dynamic changes of diurnal cortisol output in occupational groups (intraclass correlation coefficients)

	Nurses	Teachers	Hotel staff	Social service	Mixed group
Study 1					
CAR	0.564 [0.340, 0.728]	0.384 [-0.038, 0.692]	0.425 [-0.246, 0.831]	-0.039 [-0.431, 0.369]	--
Slope + t(+30)	0.598 [0.377, 0.755]	0.659 [0.335, 0.845]	0.644 [0.010, 0.915]	0.120 [-0.293, 0.498]	--
Slope + t(+0)	0.517 [0.272, 0.700]	0.441 [0.031, 0.727]	0.828 [0.402, 0.962]	0.464 [0.080, 0.730]	--
Delta + t(+30)	0.634 [0.423, 0.780]	0.625 [0.282, 0.827]	0.813 [0.310, 0.964]	-0.091 [-0.473, 0.323]	--
Delta + t(+0)	0.599 [0.379, 0.756]	0.278 [-0.156, 0.625]	0.956 [0.794, 0.992]	0.461 [0.077, 0.728]	--
Study 2					
CAR	0.293 [0.156, 0.437]	0.322 [0.201, 0.445]	0.118 [-0.140, 0.461]	0.280 [0.148, 0.418]	0.163 [-0.034, 0.396]
Slope + t(+30)	0.352 [0.215, 0.491]	0.463 [0.349, 0.573]	0.301 [0.011, 0.617]	0.293 [0.161, 0.430]	0.255 [0.048, 0.482]
Slope + t(+0)	0.382 [0.245, 0.519]	0.314 [0.195, 0.437]	0.409 [0.114, 0.694]	0.365 [0.234, 0.497]	0.325 [0.114, 0.544]
Delta + t(+30)	0.403 [0.266, 0.538]	0.417 [0.298, 0.533]	0.401 [0.106, 0.689]	0.332 [0.200, 0.466]	0.257 [0.050, 0.484]
Delta + t(+0)	0.373 [0.236, 0.510]	0.298 [0.177, 0.423]	0.427 [0.133, 0.707]	0.403 [0.274, 0.531]	0.367 [0.153, 0.582]

Intraclass correlation coefficients with [95% confidence interval] according to Shrout & Fleiss, 1979; ICC (1,1); CAR: cortisol awakening rise; Slope + (t+30): linear slope of the diurnal change in cortisol levels excluding t(+0); Slope + (t+0): linear slope of the diurnal change in cortisol levels excluding t(+30); Delta + t(+30): diurnal decrease in cortisol from t(+30) to t(20:00); Delta + t(+0): diurnal decrease in cortisol from t(+0) to t(20:00).

Table 108: Stability of cortisol parameters reflecting dynamic changes of diurnal cortisol output (intraclass correlation coefficients)

	Study 1		Study 2	
	Sample		Sample	
CAR	0.368 [0.188, 0.524]		0.298 [0.229, 0.369]	
Slope + t(+30)	0.660 [0.533, 0.759]		0.369 [0.301, 0.437]	
Slope + t(+0)	0.635 [0.500, 0.739]		0.358 [0.289, 0.427]	
Delta + t(+30)	0.665 [0.537, 0.763]		0.387 [0.319, 0.455]	
Delta + t(+0)	0.596 [0.451, 0.710]		0.366 [0.297, 0.435]	
	Men	Women	Men	Women
CAR	0.407 [0.000, 0.700]	0.366 [0.161, 0.541]	0.225 [0.105, 0.353]	0.322 [0.238, 0.408]
Slope + t(+30)	0.617 [0.280, 0.820]	0.674 [0.530, 0.780]	0.386 [0.266, 0.505]	0.363 [0.280, 0.446]
Slope + t(+0)	0.784 [0.553, 0.904]	0.571 [0.399, 0.705]	0.269 [0.148, 0.395]	0.407 [0.326, 0.488]
Delta + t(+30)	0.535 [0.153, 0.780]	0.692 [0.553, 0.793]	0.358 [0.237, 0.480]	0.401 [0.318, 0.482]
Delta + t(+0)	0.723 [0.440, 0.887]	0.541 [0.361, 0.682]	0.288 [0.166, 0.414]	0.410 [0.328, 0.491]
	Shift / yes	Shift / no	Shift / yes	Shift / no
CAR	0.455 [0.191, 0.658]	0.288 [-0.007, 0.539]	0.258 [0.125, 0.400]	0.305 [0.223, 0.388]
Slope + t(+30)	0.685 [0.486, 0.817]	0.575 [0.333, 0.746]	0.325 [0.190, 0.463]	0.388 [0.309, 0.468]
Slope + t(+0)	0.661 [0.451, 0.802]	0.420 [0.139, 0.639]	0.400 [0.267, 0.531]	0.322 [0.241, 0.404]
Delta + t(+30)	0.616 [0.382, 0.776]	0.586 [0.348, 0.753]	0.375 [0.241, 0.510]	0.392 [0.312, 0.472]
Delta + t(+0)	0.575 [0.330, 0.748]	0.437 [0.159, 0.651]	0.392 [0.259, 0.524]	0.350 [0.269, 0.432]
	Current smoker	Non-smoker	Current smoker	Non-smoker
CAR	0.638 [0.406, 0.793]	0.256 [0.008, 0.475]	0.277 [0.150, 0.411]	0.290 [0.205, 0.379]
Slope + t(+30)	0.699 [0.486, 0.834]	0.645 [0.469, 0.773]	0.344 [0.216, 0.474]	0.381 [0.297, 0.465]
Slope + t(+0)	0.569 [0.302, 0.753]	0.613 [0.427, 0.750]	0.317 [0.188, 0.448]	0.388 [0.304, 0.472]
Delta + t(+30)	0.744 [0.555, 0.860]	0.612 [0.422, 0.752]	0.343 [0.215, 0.474]	0.414 [0.331, 0.497]
Delta + t(+0)	0.653 [0.420, 0.806]	0.505 [0.287, 0.674]	0.303 [0.173, 0.437]	0.408 [0.324, 0.491]

Intraclass correlation coefficients with [95% confidence interval] according to Shrout & Fleiss, 1979; ICC (1,1); CAR: cortisol awakening rise; Slope + t(+30): linear slope of the diurnal change in cortisol levels excluding t(+0); Slope + t(+0): linear slope of the diurnal change in cortisol levels excluding t(+30); Delta + t(+30): diurnal decrease in cortisol from t(+30) to t(20:00); Delta + t(+0): diurnal decrease in cortisol from t(+0) to t(20:00).

Table 109: Descriptive statistics of cortisol levels in study 1 and study 2

Salivary cortisol (nmol/l)					
	N	Mean \pm SD	Median	Min	Max
Study 1					
t(+0)	102	13.63 \pm 8.13	13.25	2.15	35.90
t(+30)	102	24.31 \pm 14.03	22.95	3.30	66.00
t(15:00)	99	5.41 \pm 3.72	4.65	0.90	20.55
t(20:00)	98	2.56 \pm 1.92	2.23	0.30	9.60
Study 2					
t(+0)	330	15.86 \pm 8.13	14.73	0.20	54.07
t(+30)	330	24.97 \pm 12.52	22.80	1.70	68.53
t(16:00)	330	5.74 \pm 3.88	4.87	0.60	28.30
t(20:00)	329	2.80 \pm 2.71	2.20	0.30	24.40

Table 110: Descriptive statistics of cortisol levels by gender

Salivary cortisol (nmol/l)					
	N	Mean \pm SD	Median	Min	Max
MEN					
t(+0)	128	16.88 \pm 8.91	15.45	1.40	54.07
t(+30)	127	23.97 \pm 11.86	21.80	1.94	62.70
t(15:00/16:00)	127	6.28 \pm 3.78	5.53	0.60	20.55
t(20:00)	127	2.85 \pm 2.81	2.20	0.40	24.40
WOMEN					
t(+0)	304	14.68 \pm 7.77	13.87	0.20	40.73
t(+30)	305	25.16 \pm 13.28	23.00	1.70	68.53
t(15:00/16:00)	302	5.41 \pm 3.85	4.60	0.90	28.30
t(20:00)	300	2.70 \pm 2.44	2.20	0.30	19.43

Table 111: Descriptive statistics of cortisol levels by occupational groups

	Salivary cortisol (nmol/l)				
	N	Mean \pm SD	Median	Min	Max
NURSES					
t(+0)	130	13.18 \pm 8.50	12.06	1.40	40.07
t(+30)	131	24.39 \pm 14.97	20.47	1.70	62.70
t(15:00/16:00)	130	5.71 \pm 4.43	4.60	0.90	27.50
t(20:00)	129	2.77 \pm 2.30	2.30	0.30	15.67
TEACHERS					
t(+0)	129	15.97 \pm 8.18	14.90	3.80	54.07
t(+30)	129	25.51 \pm 13.34	23.37	2.43	68.53
t(15:00/16:00)	128	5.31 \pm 3.07	4.88	0.60	19.17
t(20:00)	127	2.25 \pm 2.17	1.60	0.30	19.25
HOTEL STAFF					
t(+0)	26	13.71 \pm 7.67	12.83	1.90	31.30
t(+30)	26	21.04 \pm 10.27	19.80	7.03	49.00
t(15:00/16:00)	25	5.87 \pm 5.05	4.30	0.90	22.43
t(20:00)	24	3.57 \pm 3.85	2.97	0.45	19.43
SOCIAL SERVICE ASSISTANTS					
t(+0)	112	17.53 \pm 7.69	16.60	0.20	40.73
t(+30)	112	26.16 \pm 10.74	26.38	2.90	58.40
t(15:00/16:00)	111	5.66 \pm 3.21	5.20	1.07	23.03
t(20:00)	112	2.85 \pm 2.75	2.30	0.33	24.40
MIXED GROUP					
t(+0)	35	15.13 \pm 6.95	13.87	2.61	32.20
t(+30)	34	22.22 \pm 9.87	19.67	1.94	39.90
t(15:00/16:00)	35	6.63 \pm 4.88	5.63	1.53	28.30
t(20:00)	35	3.54 \pm 2.67	2.67	0.43	12.17

Table 112: Descriptive statistics of cortisol levels by shift work

	Salivary cortisol (nmol/l)				
	N	Mean \pm SD	Median	Min	Max
NO SHIFT WORK					
t(+0)	282	15.08 \pm 7.89	13.91	0.20	54.07
t(+30)	281	23.12 \pm 11.93	20.67	1.94	68.53
t(15:00/16:00)	281	5.35 \pm 3.66	4.70	0.60	28.30
t(20:00)	279	2.60 \pm 2.52	2.00	0.30	24.40
SHIFT WORK					
t(+0)	130	15.67 \pm 8.77	14.68	1.40	40.07
t(+30)	131	28.50 \pm 14.46	27.33	1.70	66.00
t(15:00/16:00)	129	6.24 \pm 4.30	4.87	1.03	27.50
t(20:00)	128	2.96 \pm 2.65	2.43	0.30	19.43

Table 113: Descriptive statistics of cortisol levels by smoking status

	Salivary cortisol (nmol/l)				
	N	Mean \pm SD	Median	Min	Max
NON-SMOKER					
t(+0)	276	15.91 \pm 7.91	14.93	0.20	40.73
t(+30)	277	24.87 \pm 12.64	23.35	1.70	68.53
t(15:00/16:00)	275	5.30 \pm 3.44	4.73	0.90	28.30
t(20:00)	274	2.37 \pm 2.02	1.90	0.30	19.25
CURRENT SMOKER					
t(+0)	133	13.92 \pm 8.21	13.60	1.40	40.37
t(+30)	132	24.57 \pm 13.54	21.27	1.94	61.97
t(15:00/16:00)	131	6.00 \pm 4.23	4.60	0.60	22.43
t(20:00)	130	3.38 \pm 3.37	2.53	0.30	24.40

Table 114: Descriptive statistics of cortisol levels (parameters) in study 1 and study 2

	Salivary cortisol (nmol/l)				
	N	Mean \pm SD	Median	Min	Max
Study 1					
Cortisol awakening rise	102	10.85 \pm 11.51	8.20	-6.95	51.10
Total morning cortisol release	102	18.90 \pm 9.91	19.55	2.73	41.53
Diurnal cortisol decline					
Delta [t(+30) – t(20:00)]	96	22.19 \pm 14.30	21.28	-6.20	63.50
Delta [t(+0) – t(20:00)]	97	11.50 \pm 8.44	10.45	-9.00	32.95
Study 2					
Cortisol awakening rise	327	9.13 \pm 11.67	8.13	-30.27	51.80
Total morning cortisol release	330	20.21 \pm 8.93	18.98	1.65	52.13
Diurnal cortisol decline					
Delta [t(+30) – t(20:00)]	326	22.17 \pm 12.56	20.55	-2.95	67.35
Delta [t(+0) – t(20:00)]	326	13.21 \pm 8.18	12.11	-5.83	52.97

Table 115: Descriptive statistics of cortisol levels (parameters) by gender

	Salivary cortisol (nmol/l)				
	N	Mean \pm SD	Median	Min	Max
MEN					
Cortisol awakening rise	127	7.03 \pm 10.74	6.83	-30.27	38.93
Total morning cortisol release	128	20.16 \pm 9.05	18.80	1.65	46.50
Diurnal cortisol decline					
Delta [t(+30) – t(20:00)]	126	21.21 \pm 12.05	20.48	-1.35	57.30
Delta [t(+0) – t(20:00)]	125	14.42 \pm 8.97	13.03	-1.20	52.97
WOMEN					
Cortisol awakening rise	302	10.59 \pm 11.86	9.00	-23.10	51.80
Total morning cortisol release	304	19.79 \pm 9.24	19.02	2.73	52.13
Diurnal cortisol decline					
Delta [t(+30) – t(20:00)]	296	22.59 \pm 13.32	21.13	-6.20	67.35
Delta [t(+0) – t(20:00)]	298	12.14 \pm 7.87	11.58	-9.00	36.37

Table 116: Descriptive statistics of cortisol levels (parameters) by occupational groups

	Salivary cortisol (nmol/l)				
	N	Mean \pm SD	Median	Min	Max
NURSES					
Cortisol awakening rise	130	11.83 \pm 12.41	9.50	-23.10	43.95
Total morning cortisol release	130	18.70 \pm 10.76	17.17	1.65	52.13
Diurnal cortisol decline					
Delta [t(+30) – t(20:00)]	125	21.81 \pm 14.93	18.50	-6.20	63.10
Delta [t(+0) – t(20:00)]	127	10.41 \pm 8.12	9.47	-9.00	35.87
TEACHERS					
Cortisol awakening rise	128	9.63 \pm 12.56	7.67	-26.90	51.80
Total morning cortisol release	129	20.57 \pm 9.11	19.13	3.12	42.63
Diurnal cortisol decline					
Delta [t(+30) – t(20:00)]	127	23.39 \pm 13.56	21.93	-2.95	67.35
Delta [t(+0) – t(20:00)]	127	14.03 \pm 8.19	12.47	-3.60	52.97
HOTEL STAFF					
Cortisol awakening rise	26	7.29 \pm 7.94	7.79	-11.80	20.93
Total morning cortisol release	26	17.48 \pm 8.21	16.53	6.18	40.15
Diurnal cortisol decline					
Delta [t(+30) – t(20:00)]	24	17.93 \pm 11.53	15.70	-1.07	47.50
Delta [t(+0) – t(20:00)]	24	10.83 \pm 9.05	9.97	-5.83	29.70
SOCIAL SERVICE ASSISTANTS					
Cortisol awakening rise	111	8.55 \pm 11.08	7.53	-30.27	39.43
Total morning cortisol release	112	21.52 \pm 7.52	22.31	5.62	39.20
Diurnal cortisol decline					
Delta [t(+30) – t(20:00)]	112	23.09 \pm 10.46	22.99	0.80	61.20
Delta [t(+0) – t(20:00)]	112	14.72 \pm 7.81	14.15	-2.90	38.13
MIXED GROUP					
Cortisol awakening rise	34	7.06 \pm 8.04	7.90	-6.67	23.43
Total morning cortisol release	35	18.56 \pm 7.70	17.32	2.28	35.55
Diurnal cortisol decline					
Delta [t(+30) – t(20:00)]	34	18.94 \pm 10.37	15.52	-1.35	41.20
Delta [t(+0) – t(20:00)]	33	12.40 \pm 7.86	12.00	-3.20	32.60

Table 117: Descriptive statistics of cortisol levels (parameters) by shift work

	Salivary cortisol (nmol/l)				
	N	Mean \pm SD	Median	Min	Max
NO SHIFT WORK					
Cortisol awakening rise	279	8.03 \pm 10.91	7.20	-30.27	51.80
Total morning cortisol release	282	18.87 \pm 8.42	17.40	2.28	46.50
Diurnal cortisol decline					
Delta [t(+30) – t(20:00)]	278	20.56 \pm 12.12	18.13	-2.95	67.35
Delta [t(+0) – t(20:00)]	277	12.77 \pm 7.97	11.90	-3.60	52.97
SHIFT WORK					
Cortisol awakening rise	130	13.03 \pm 12.99	10.64	-23.10	51.10
Total morning cortisol release	130	22.05 \pm 10.42	21.38	1.65	52.13
Diurnal cortisol decline					
Delta [t(+30) – t(20:00)]	124	25.93 \pm 14.26	27.45	-2.95	63.50
Delta [t(+0) – t(20:00)]	126	12.80 \pm 8.65	12.20	-5.83	35.87

Table 118: Descriptive statistics of cortisol levels (parameters) by smoking status

	Salivary cortisol (nmol/l)				
	N	Mean \pm SD	Median	Min	Max
NON-SMOKER					
Cortisol awakening rise	274	8.93 \pm 11.43	7.27	-30.27	51.80
Total morning cortisol release	276	20.16 \pm 8.91	19.20	3.12	52.13
Diurnal cortisol decline					
Delta [t(+30) – t(20:00)]	270	22.75 \pm 12.65	21.38	-2.95	67.35
Delta [t(+0) – t(20:00)]	272	13.77 \pm 7.92	12.67	-3.60	36.37
CURRENT SMOKER					
Cortisol awakening rise	132	10.77 \pm 11.74	9.48	-17.57	43.53
Total morning cortisol release	133	19.20 \pm 9.71	18.40	1.65	51.02
Diurnal cortisol decline					
Delta [t(+30) – t(20:00)]	129	21.04 \pm 13.73	17.77	-6.20	63.10
Delta [t(+0) – t(20:00)]	128	10.85 \pm 8.05	10.58	-9.00	38.13

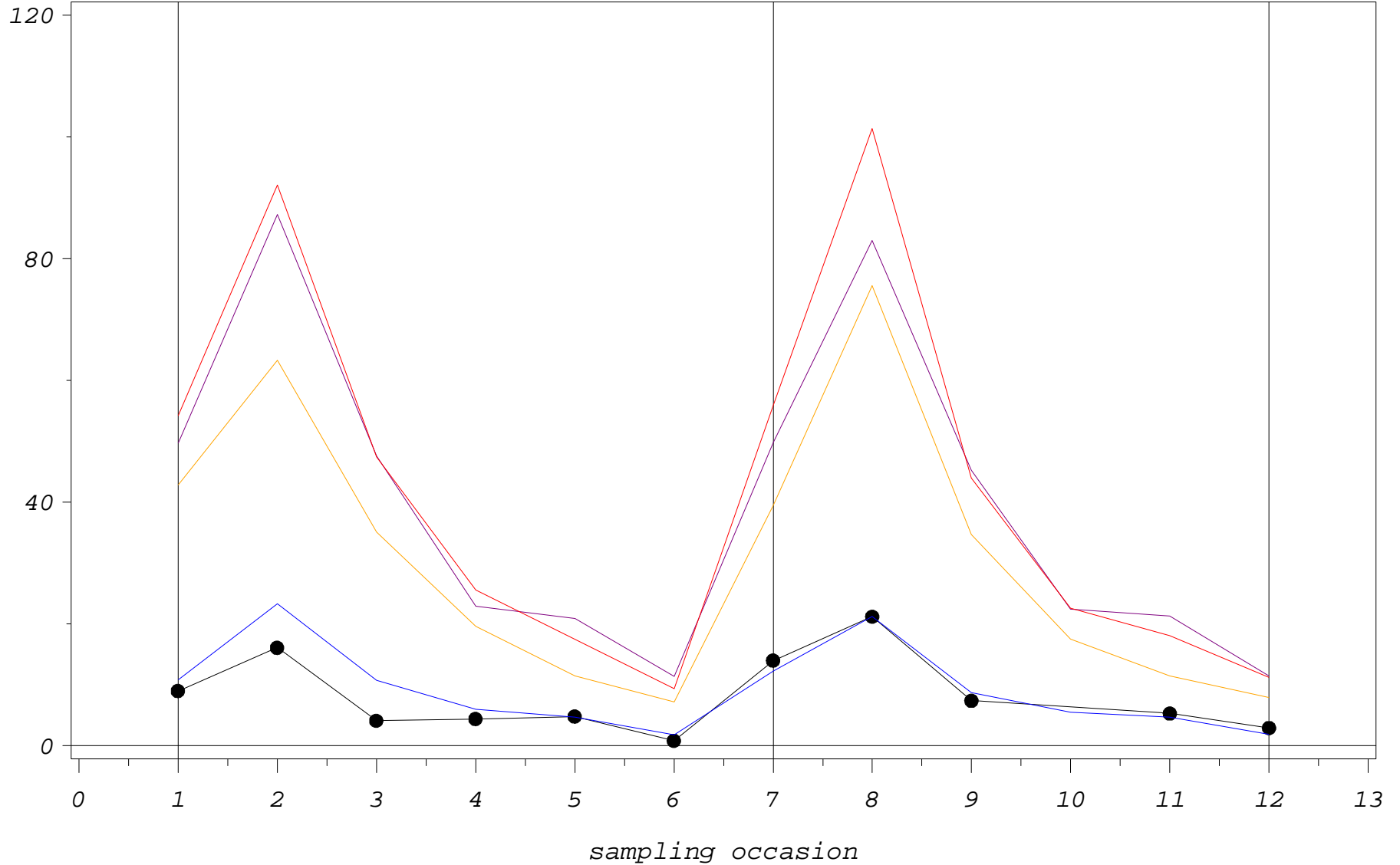
Appendix 2

Cortisol Single Profiles

Study 1: cortisol single profiles with outlier fences

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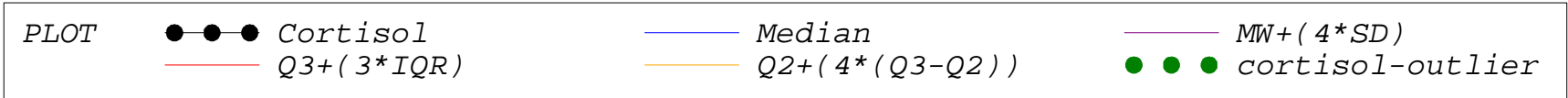
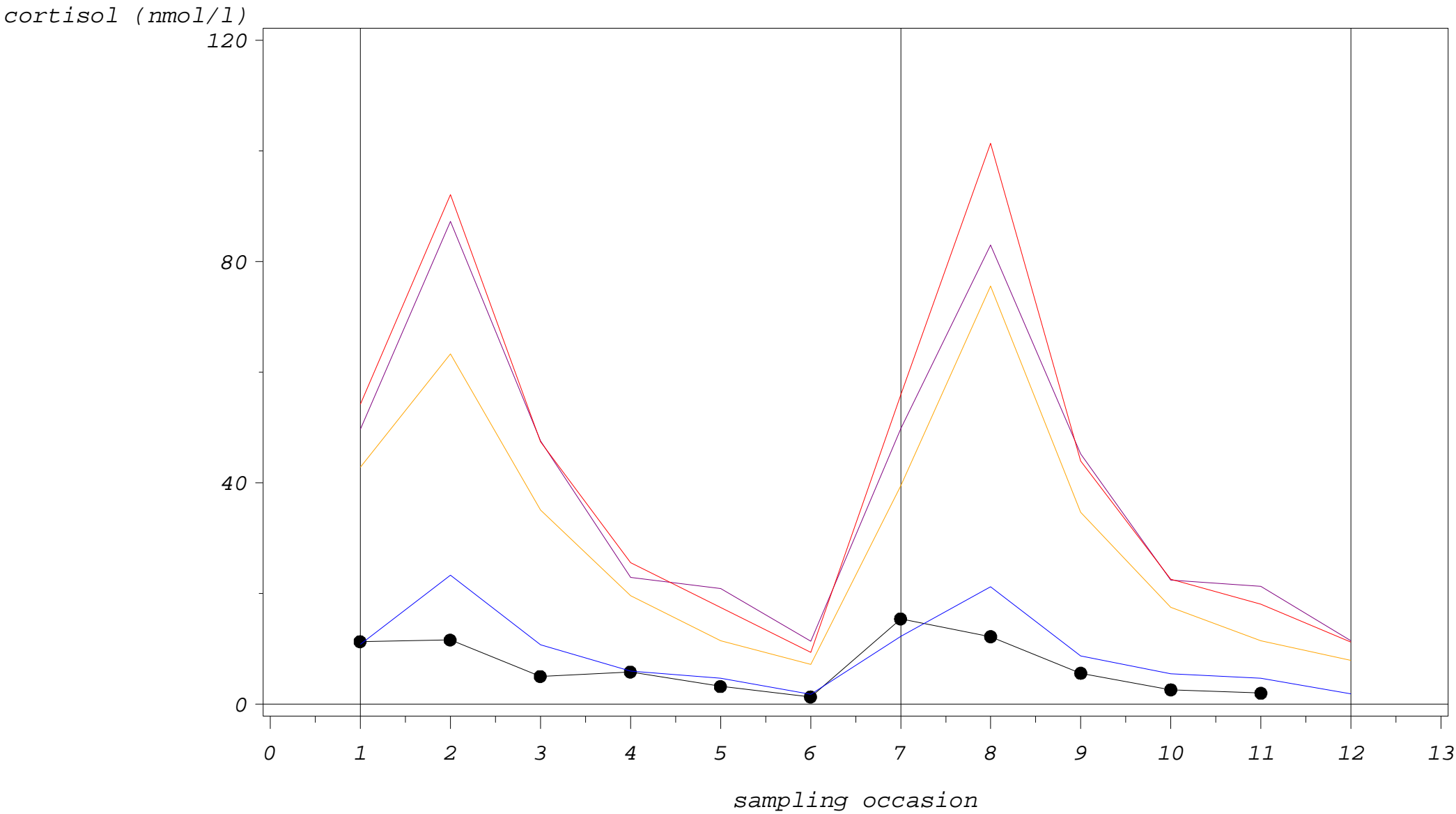
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW+(4 \cdot SD)$
 — $Q3+(3 \cdot IQR)$ — $Q2+(4 \cdot (Q3-Q2))$ ● ● ● cortisol-outlier

Study 1: cortisol single profiles with outlier fences

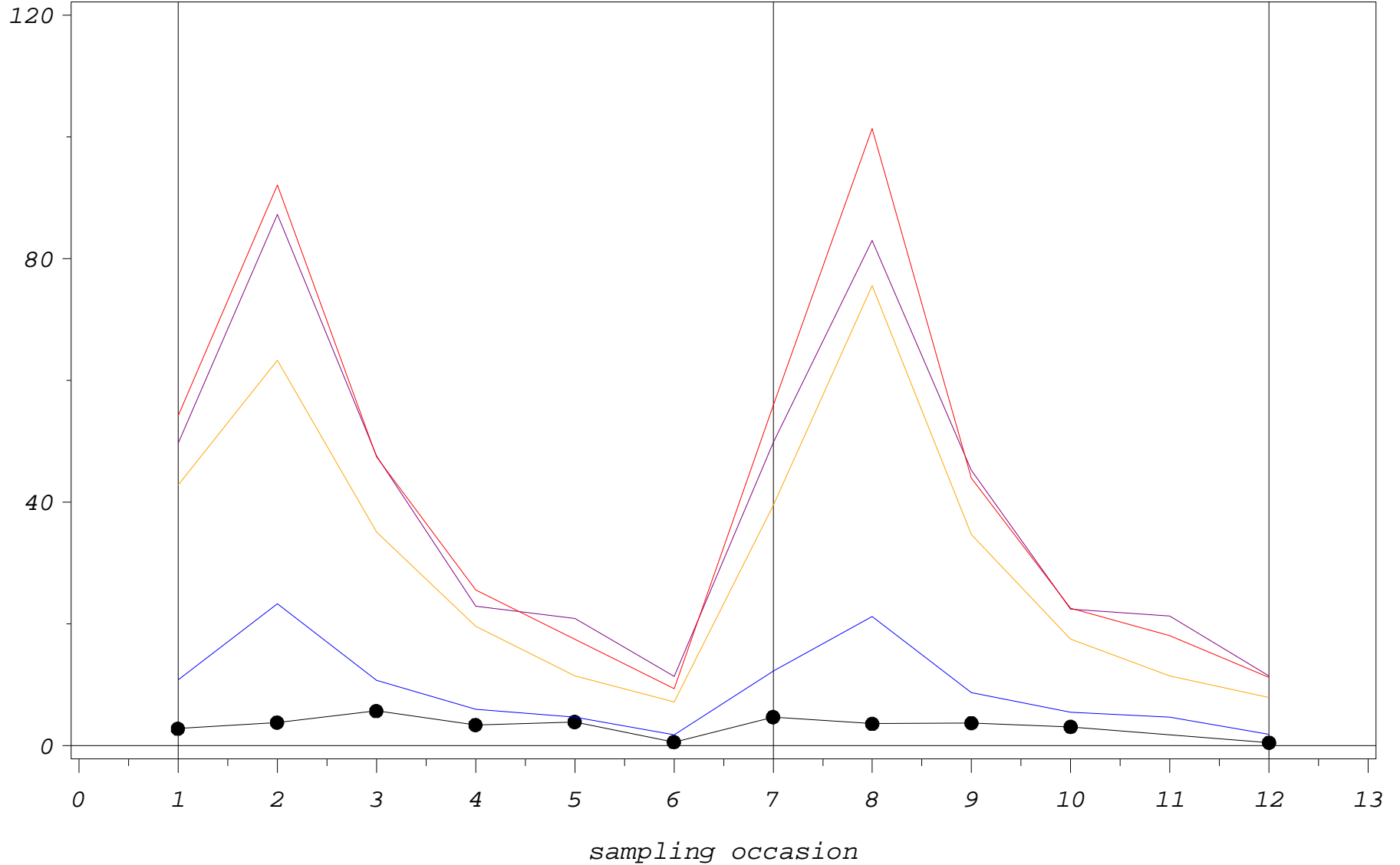
CODE=P00102



Study 1: cortisol single profiles with outlier fences

CODE=P00103

cortisol (nmol/l)

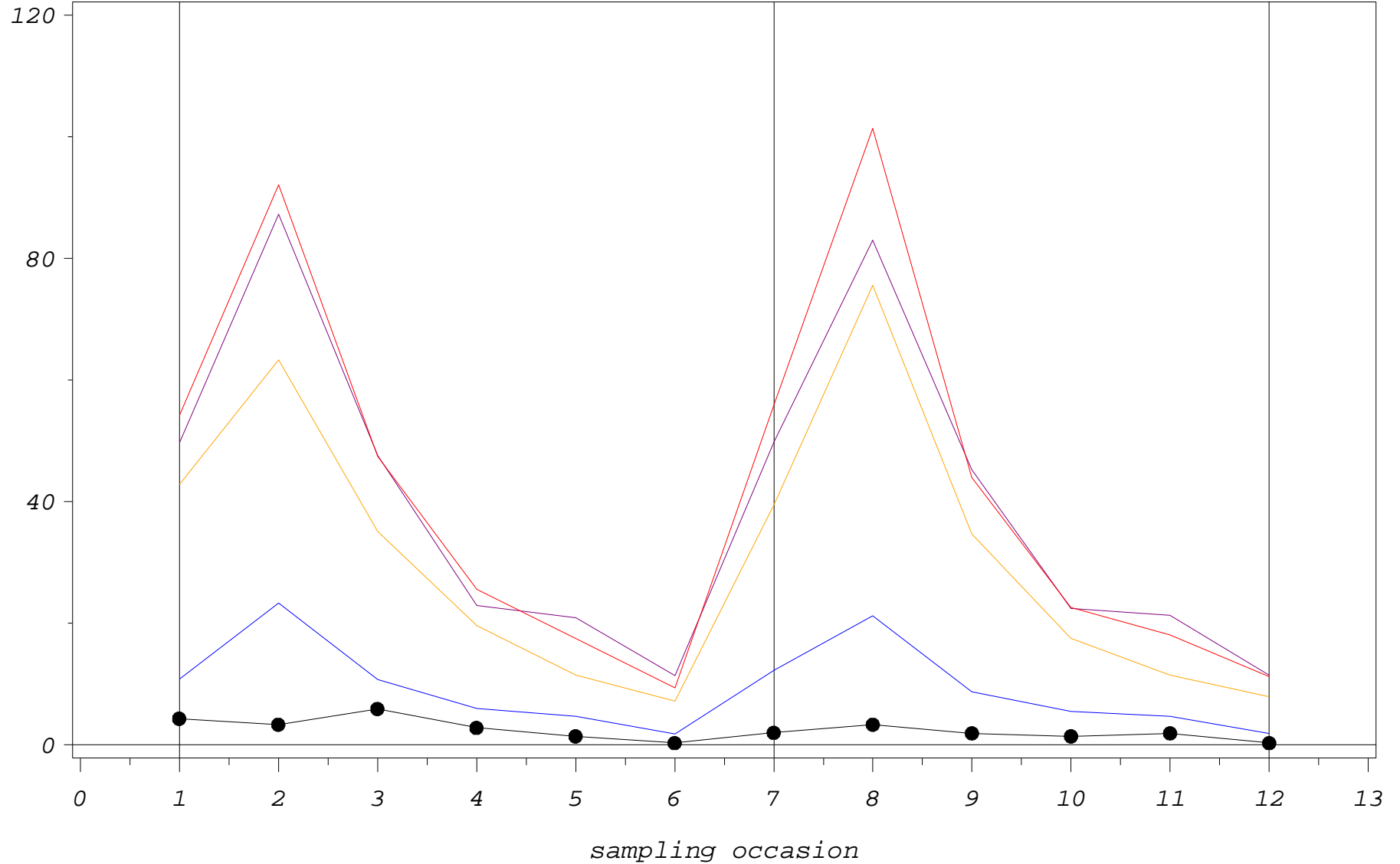


PLOT ●—●—● Cortisol — Median — $MW + (4 \times SD)$
 — $Q3 + (3 \times IQR)$ — $Q2 + (4 \times (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 1: cortisol single profiles with outlier fences

CODE=P00104

cortisol (nmol/l)



PLOT

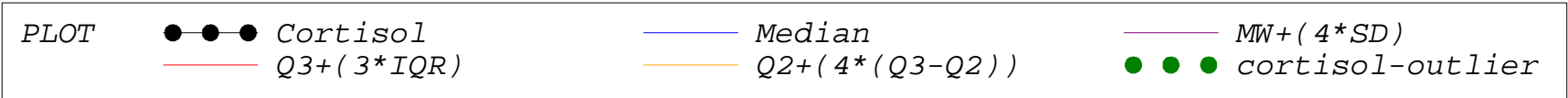
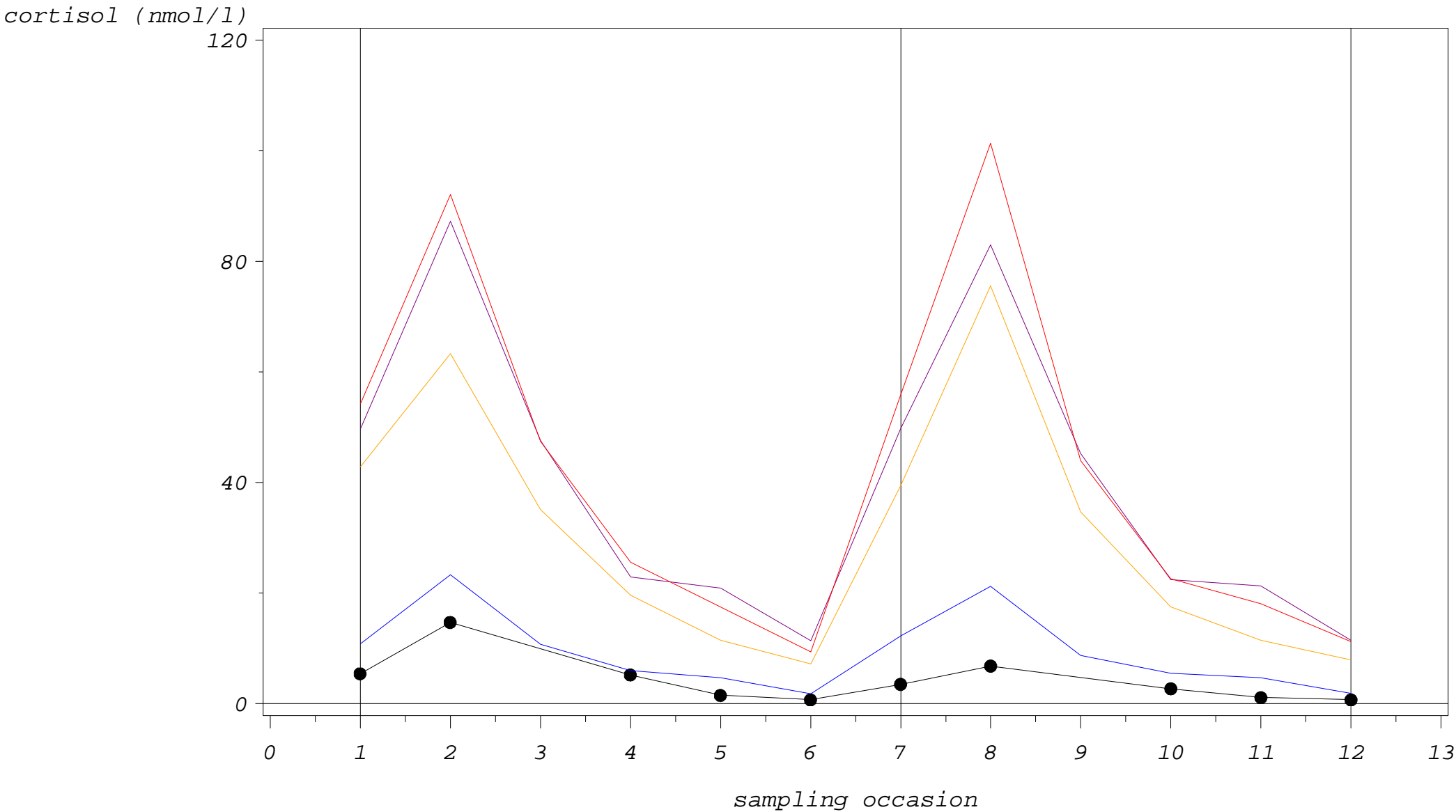
●—●—● Cortisol
— Q3+(3*IQR)

— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
● ● ● cortisol-outlier

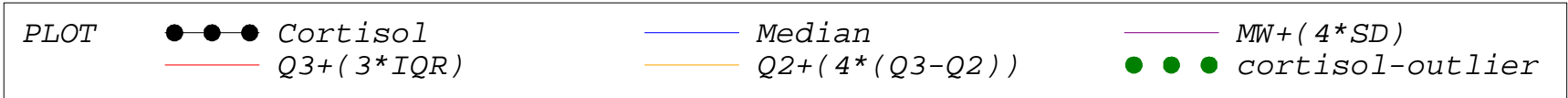
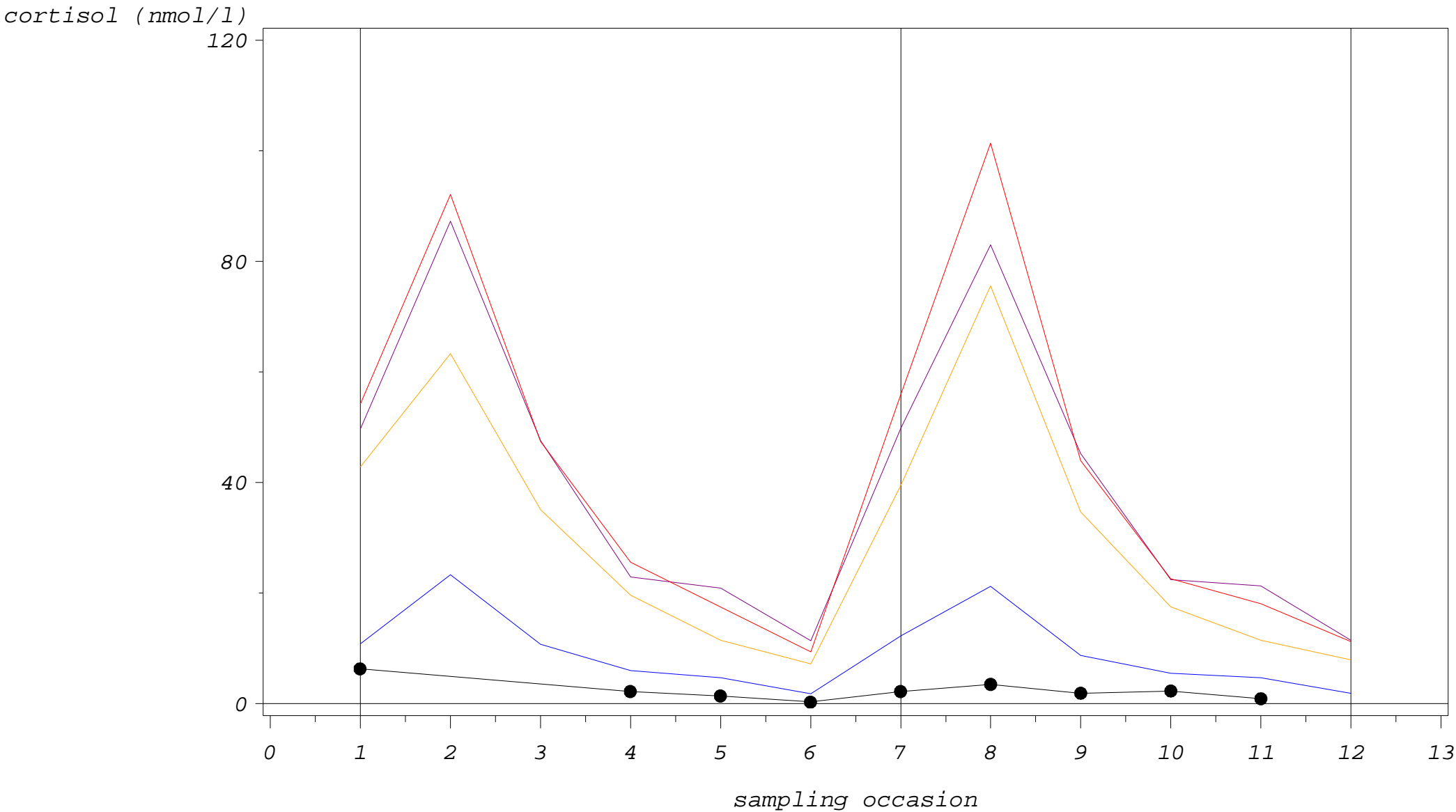
Study 1: cortisol single profiles with outlier fences

CODE=P00105



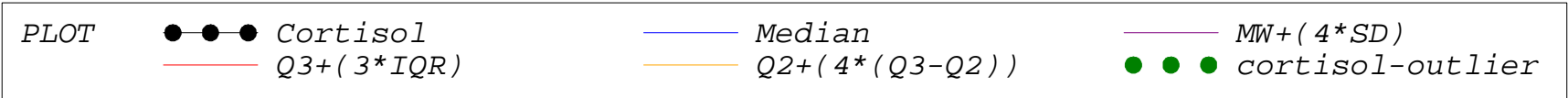
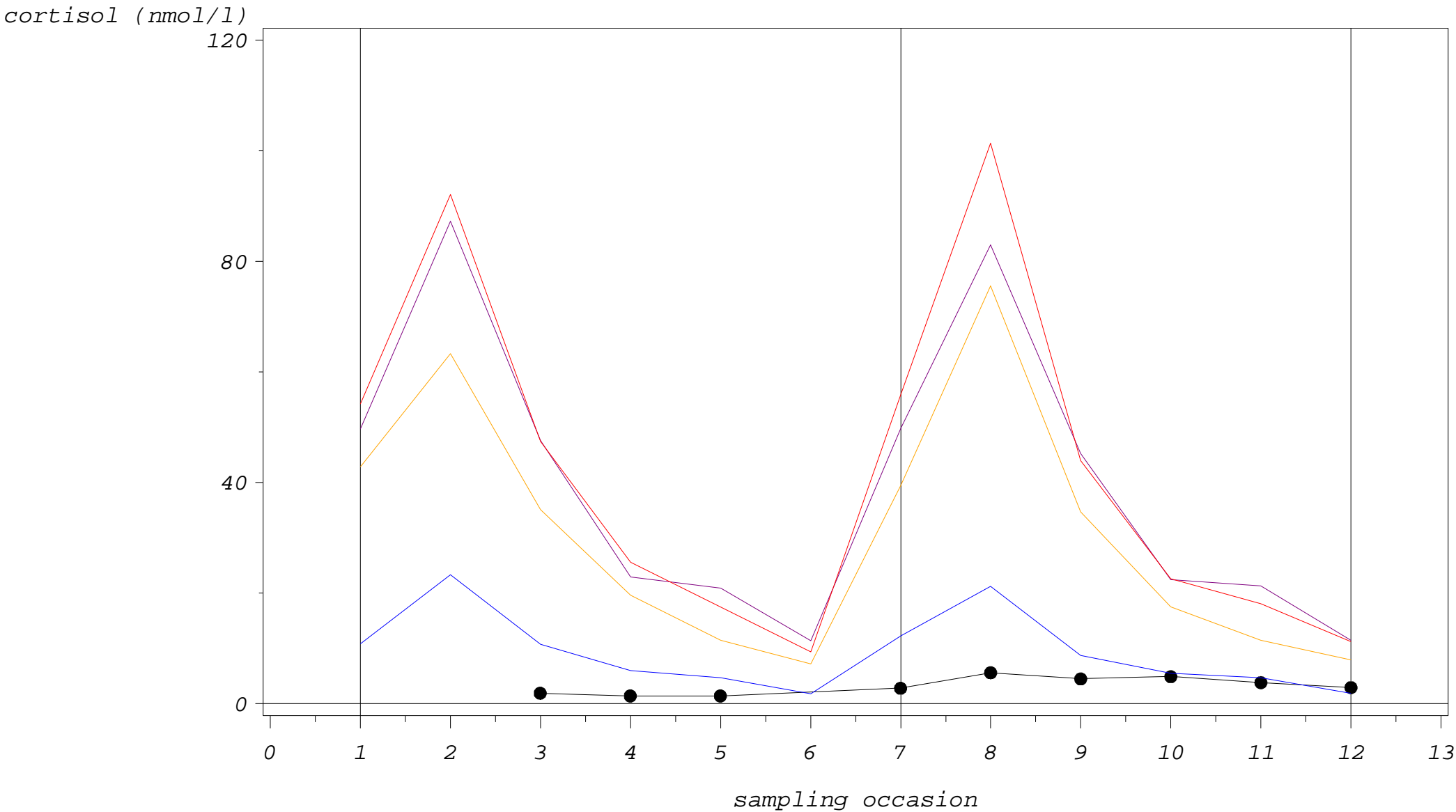
Study 1: cortisol single profiles with outlier fences

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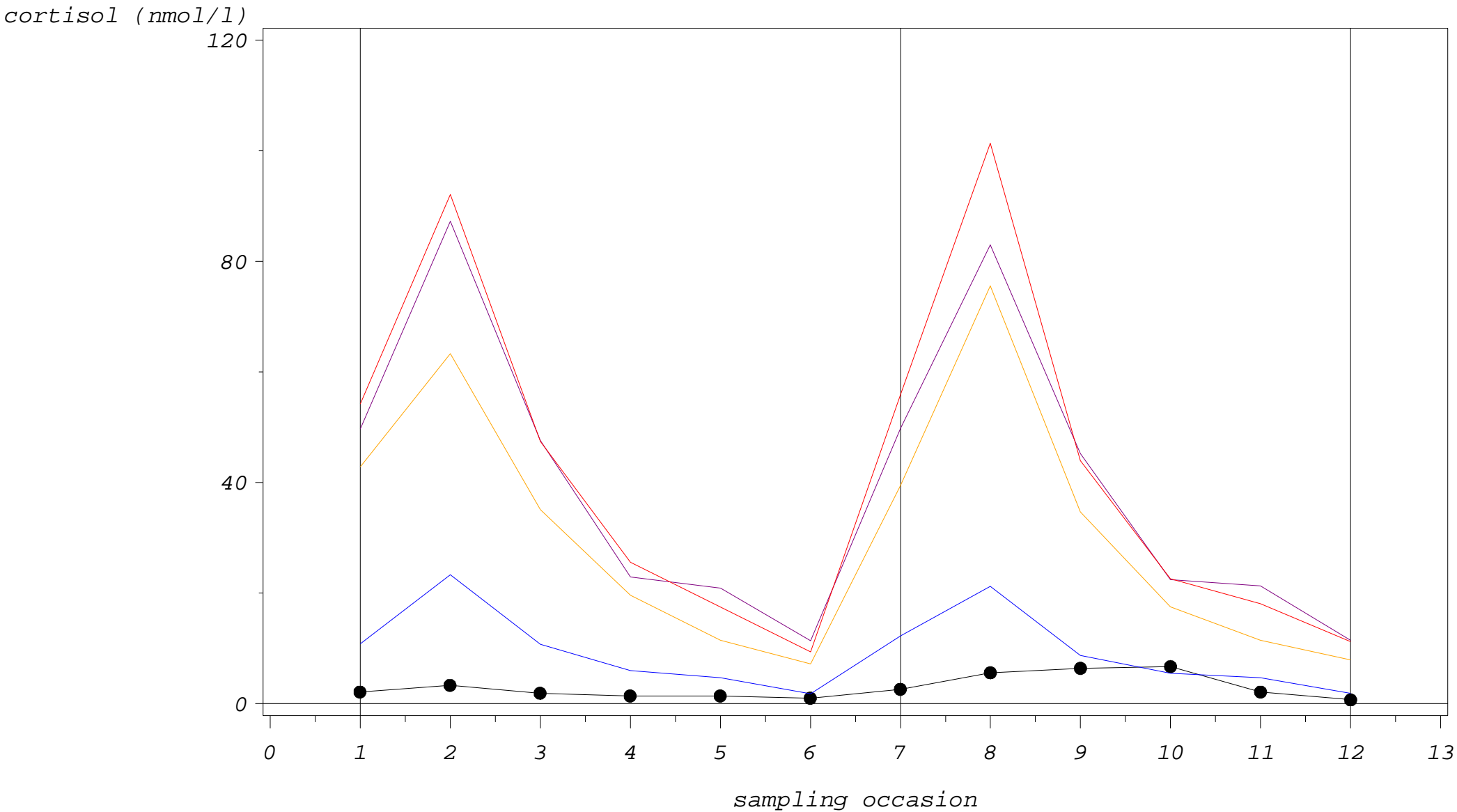
Study 1: cortisol single profiles with outlier fences

CODE=P00107



Study 1: cortisol single profiles with outlier fences

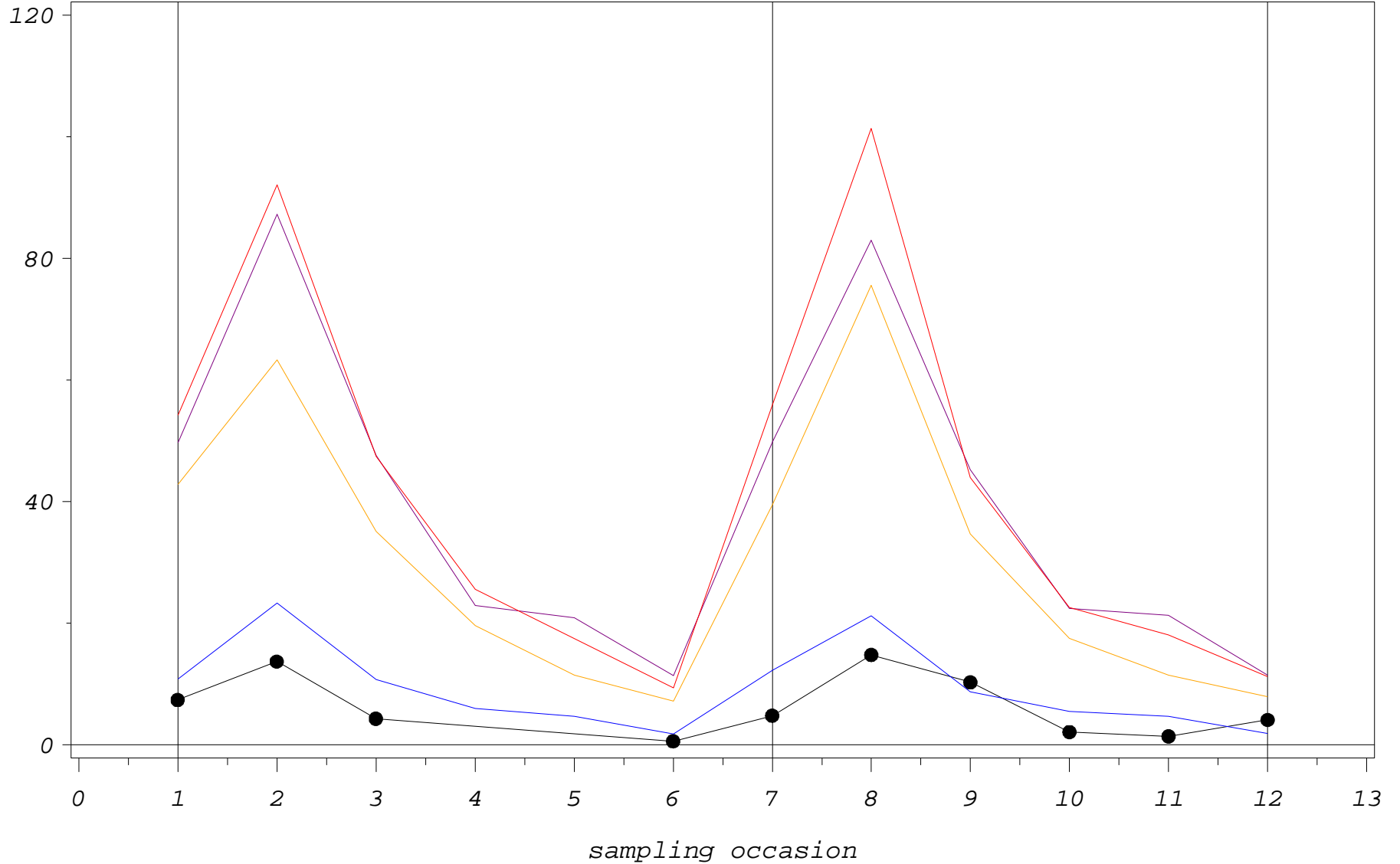
CODE=P00108



Study 1: cortisol single profiles with outlier fences

CODE=P00201

cortisol (nmol/l)



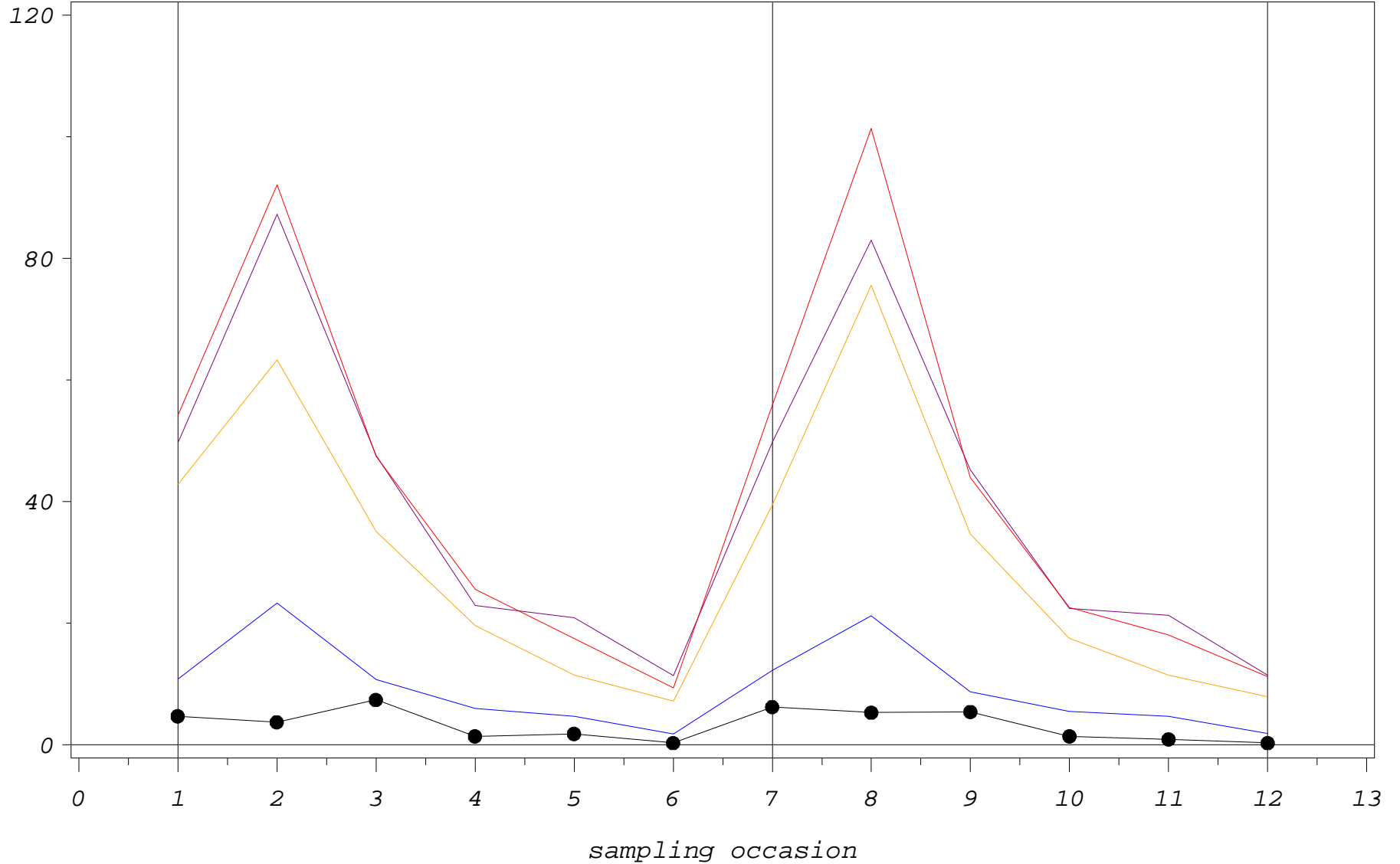
PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 1: cortisol single profiles with outlier fences

CODE=P00202

cortisol (nmol/l)



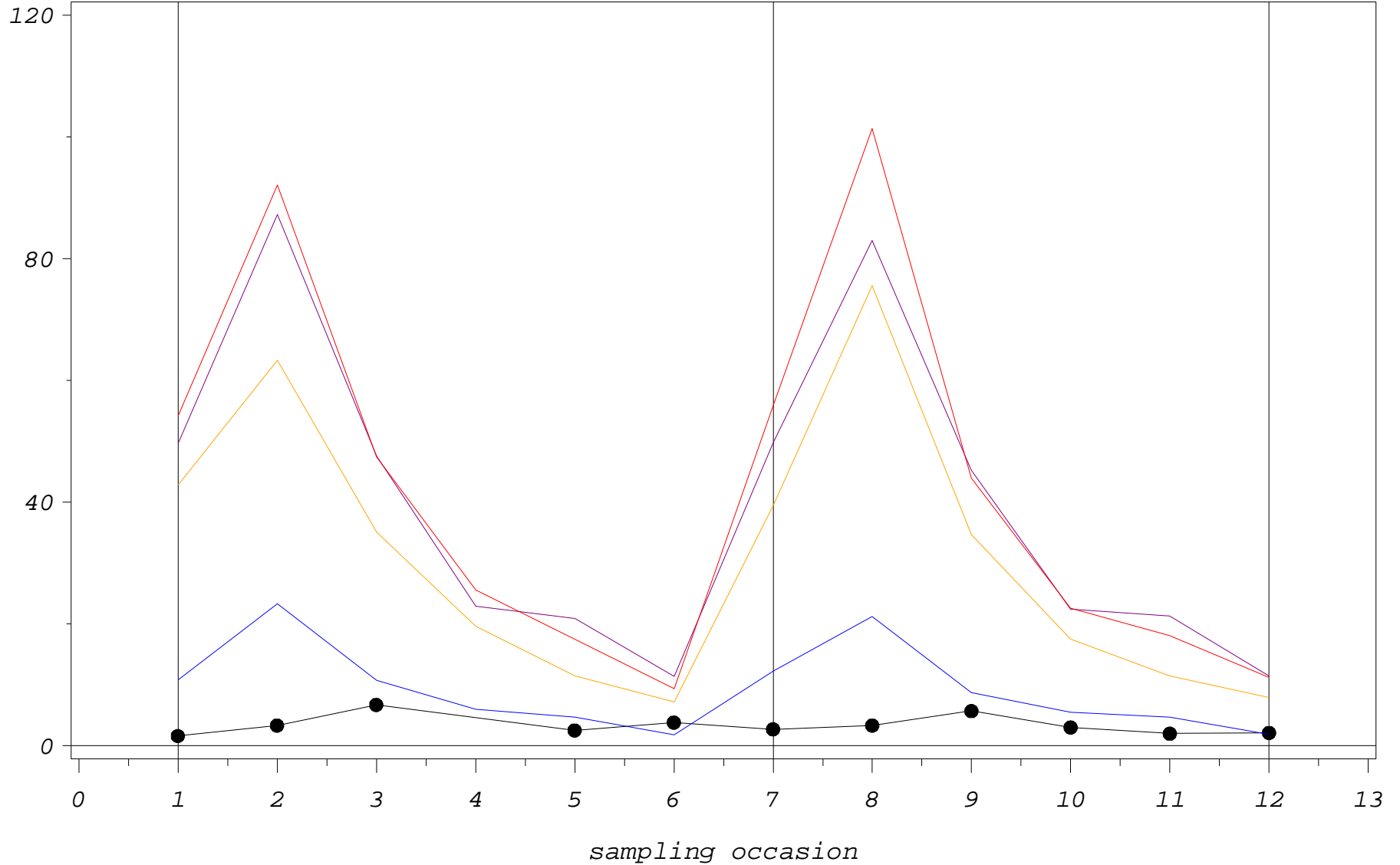
PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 1: cortisol single profiles with outlier fences

CODE=P00203

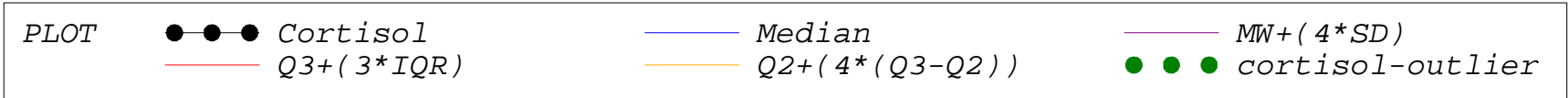
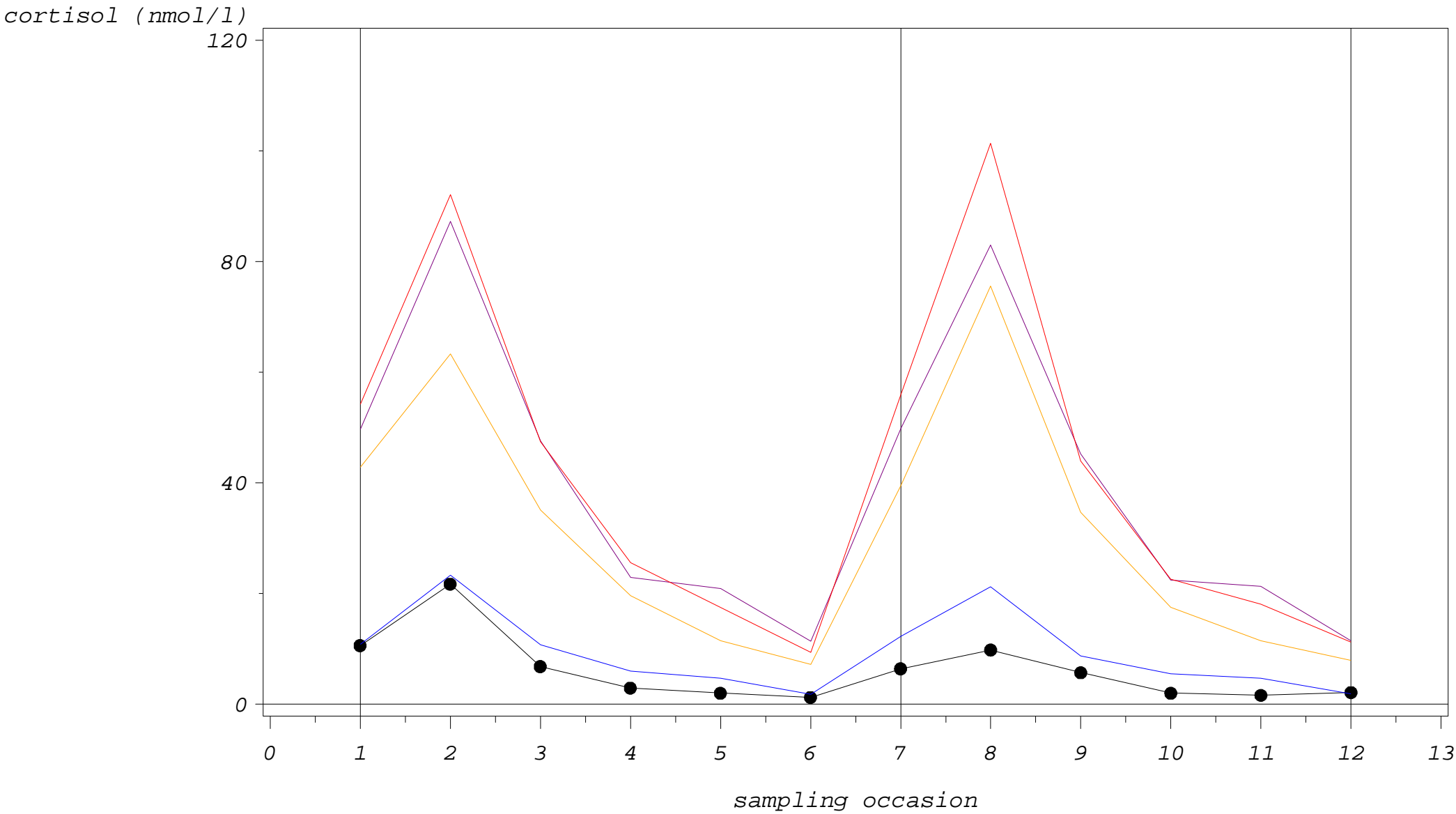
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 * SD)$
 — $Q3 + (3 * IQR)$ — $Q2 + (4 * (Q3 - Q2))$ ● ● ● cortisol-outlier

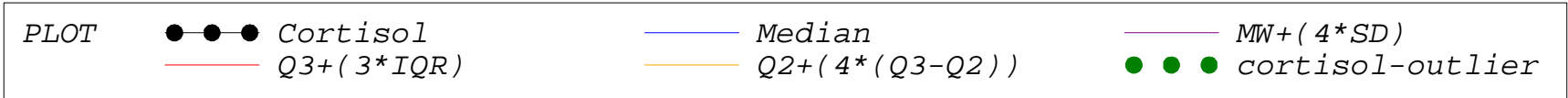
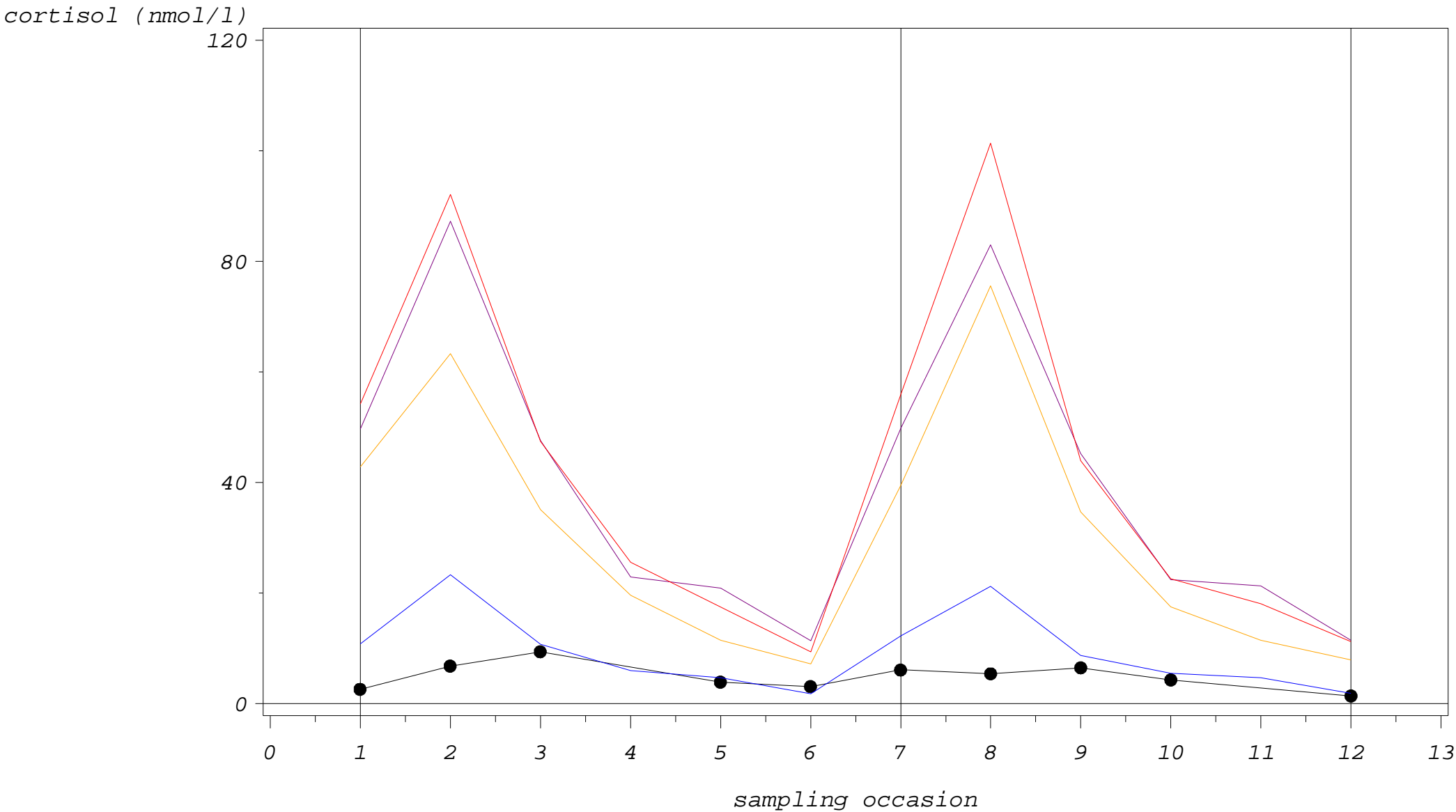
Study 1: cortisol single profiles with outlier fences

CODE=P00204



Study 1: cortisol single profiles with outlier fences

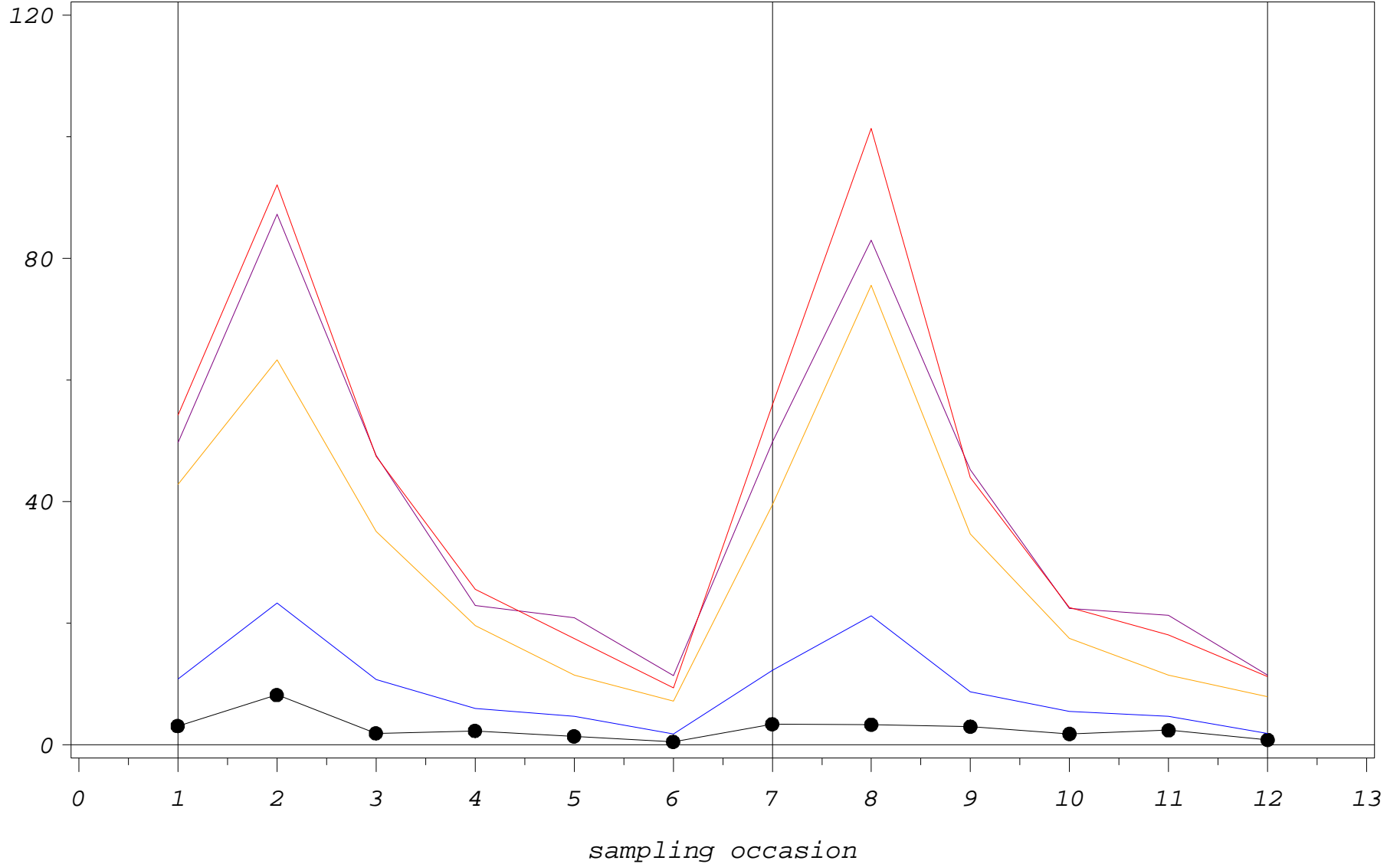
CODE=P00205



Study 1: cortisol single profiles with outlier fences

CODE=P00206

cortisol (nmol/l)



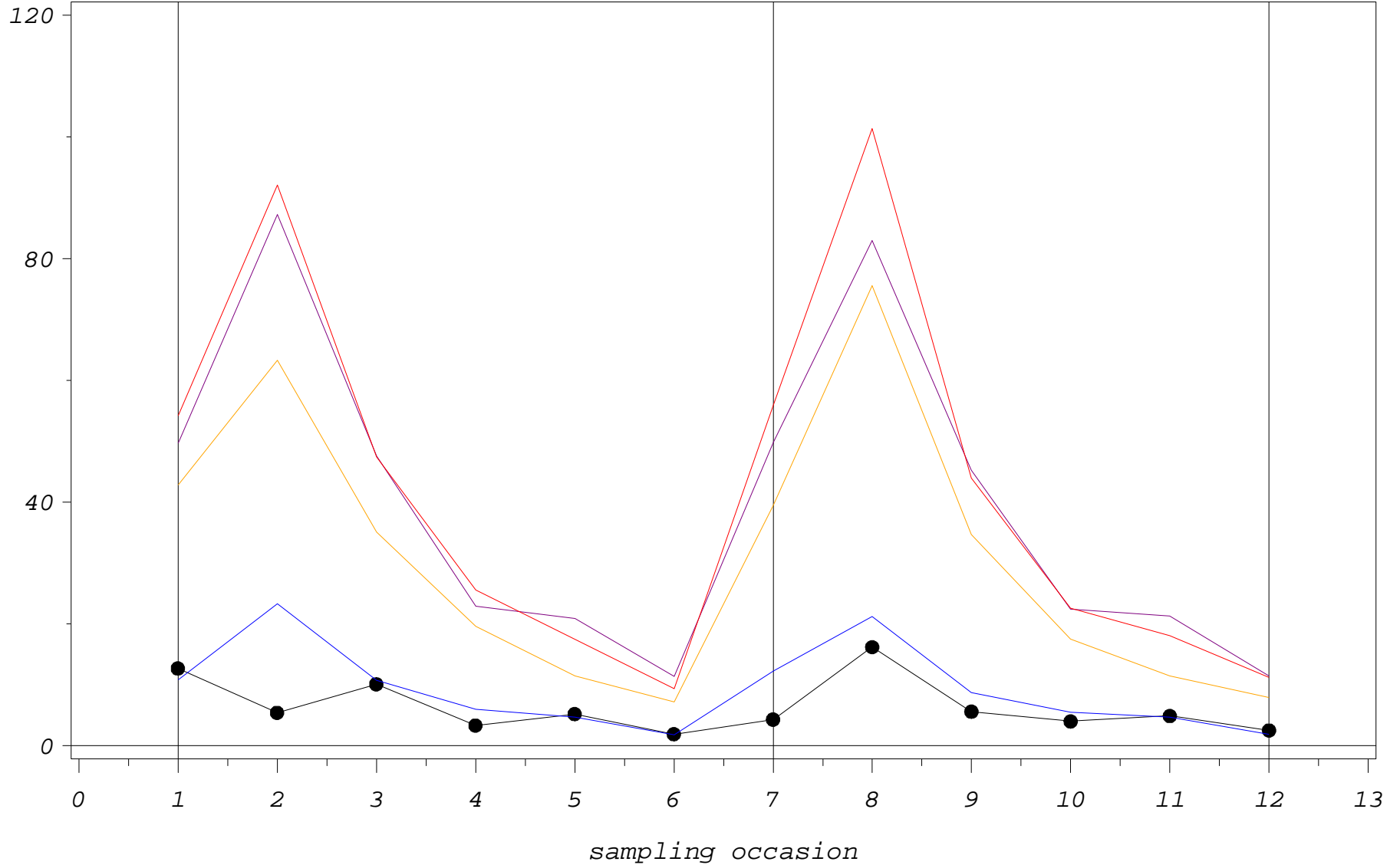
PLOT

●—●—●	Cortisol	—	Median	—	$MW + (4 * SD)$
—	$Q3 + (3 * IQR)$	—	$Q2 + (4 * (Q3 - Q2))$	●●●	cortisol-outlier

Study 1: cortisol single profiles with outlier fences

CODE=P00207

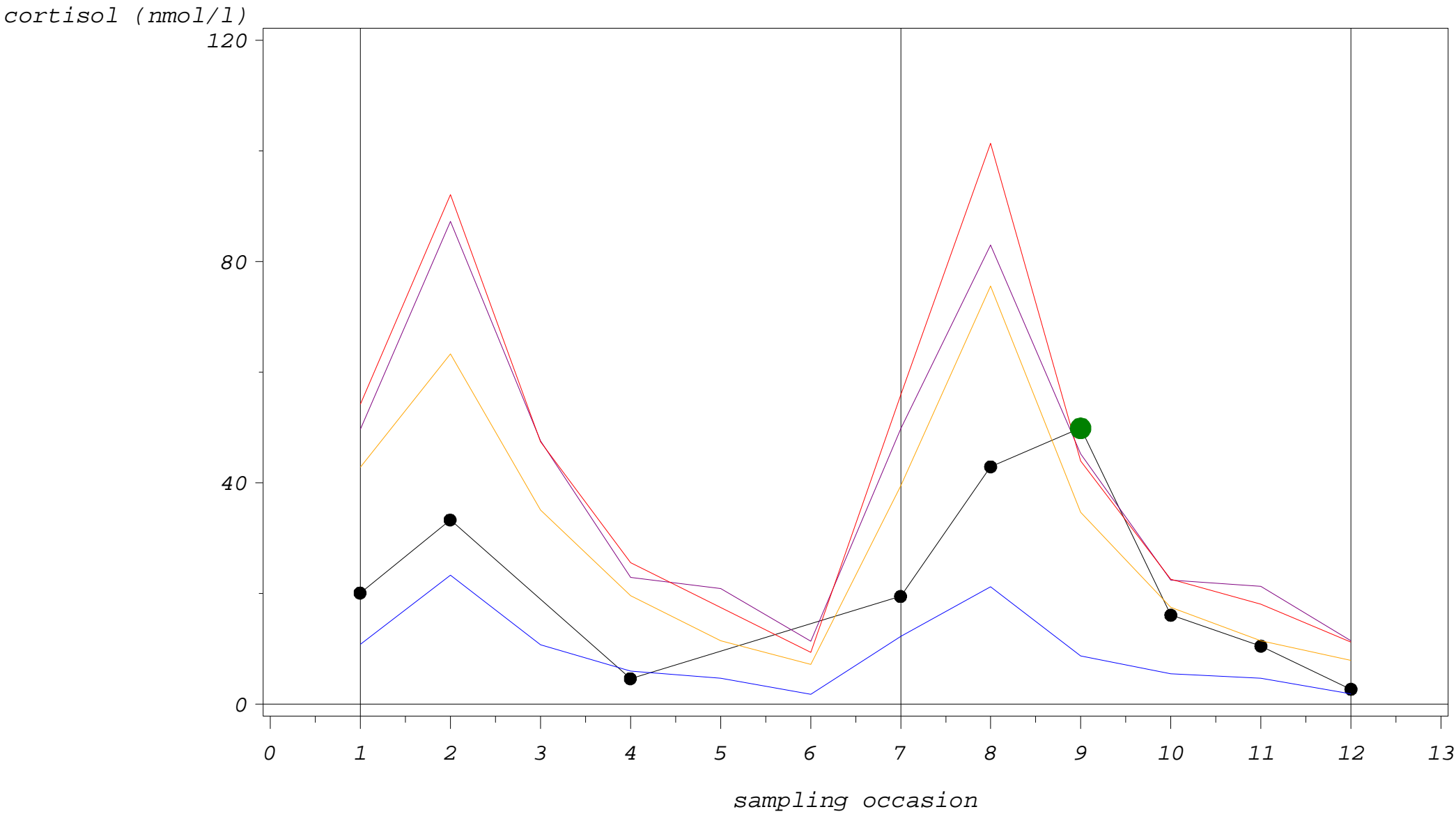
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 * SD)$
 — $Q3 + (3 * IQR)$ — $Q2 + (4 * (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 1: cortisol single profiles with outlier fences

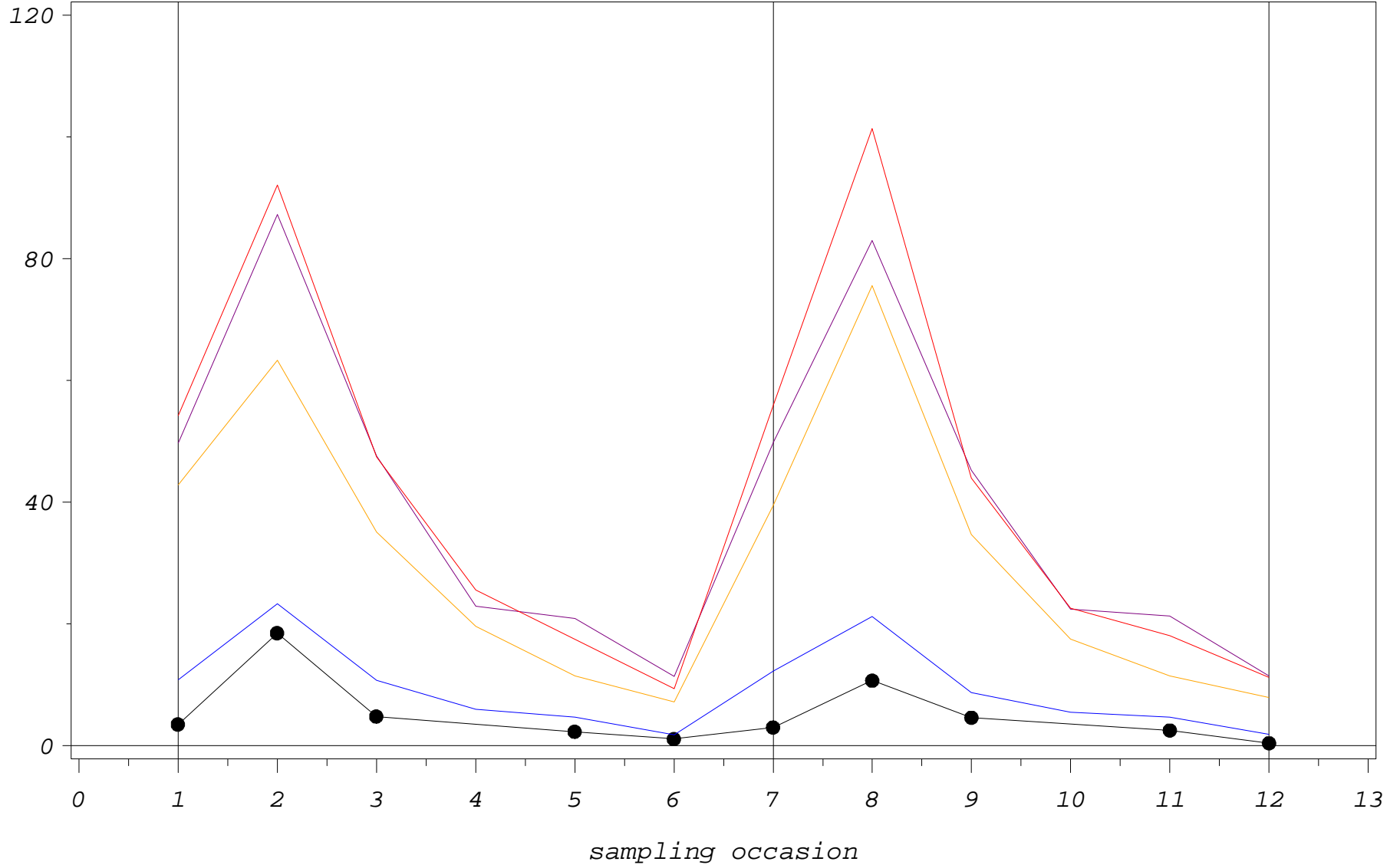
CODE=P00209



Study 1: cortisol single profiles with outlier fences

CODE=P00210

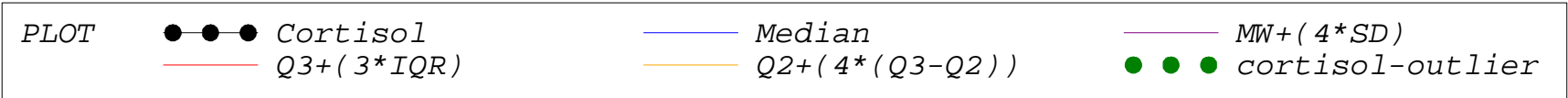
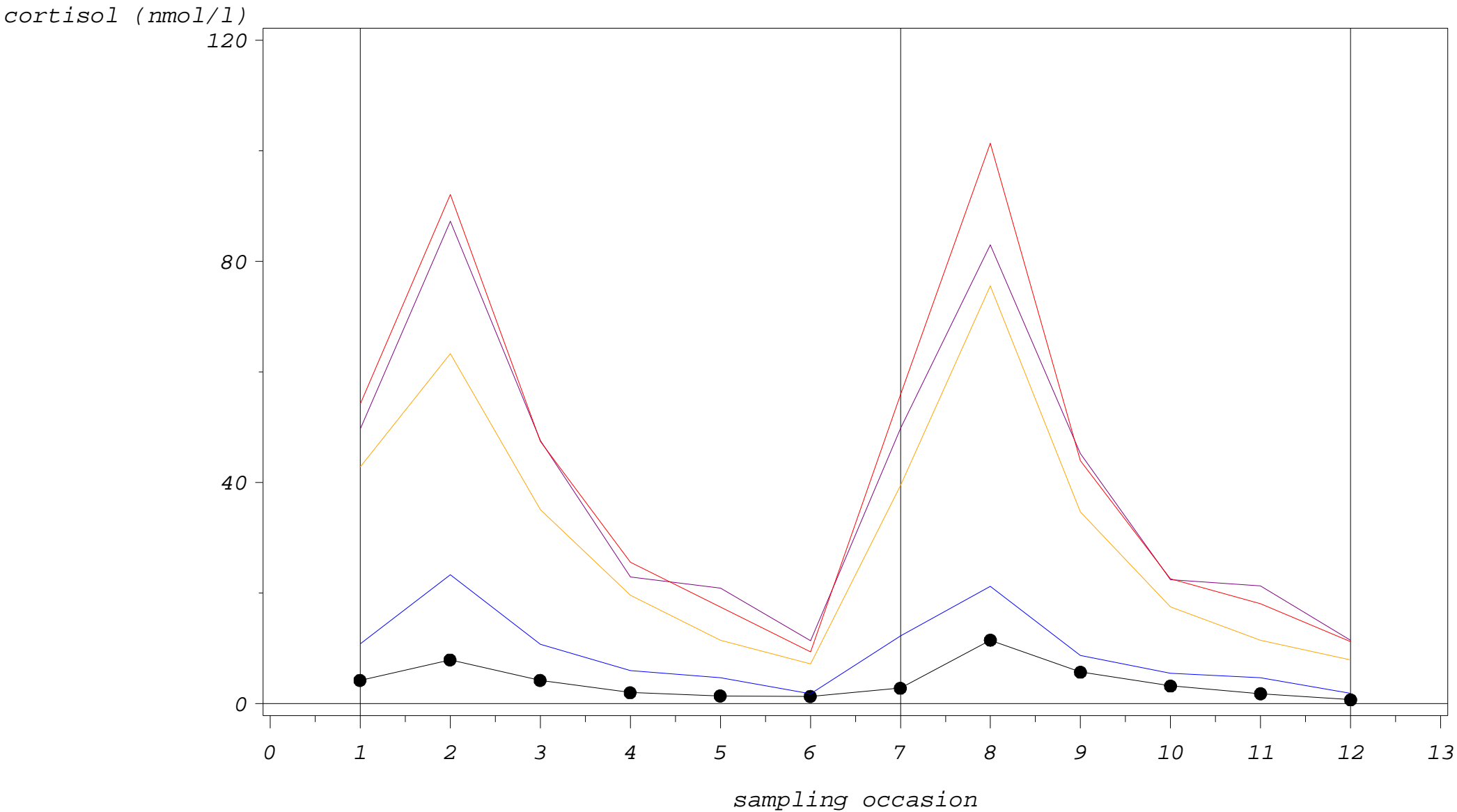
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 \times SD)$
 — $Q3 + (3 \times IQR)$ — $Q2 + (4 \times (Q3 - Q2))$ ● ● ● cortisol-outlier

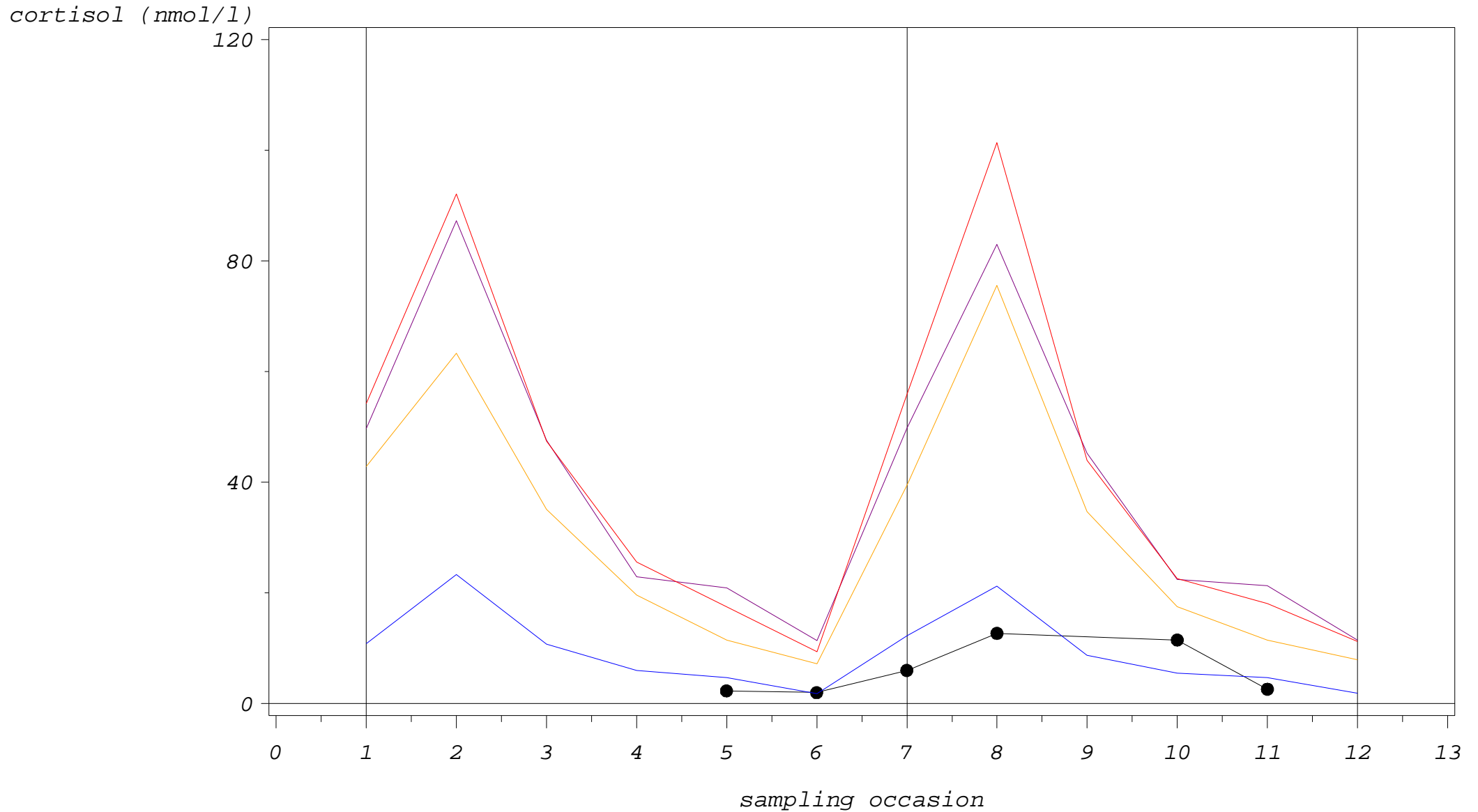
Study 1: cortisol single profiles with outlier fences

CODE=P00211



Study 1: cortisol single profiles with outlier fences

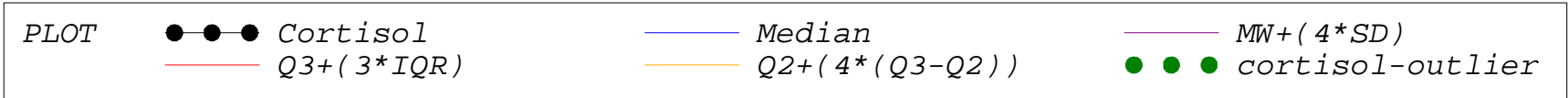
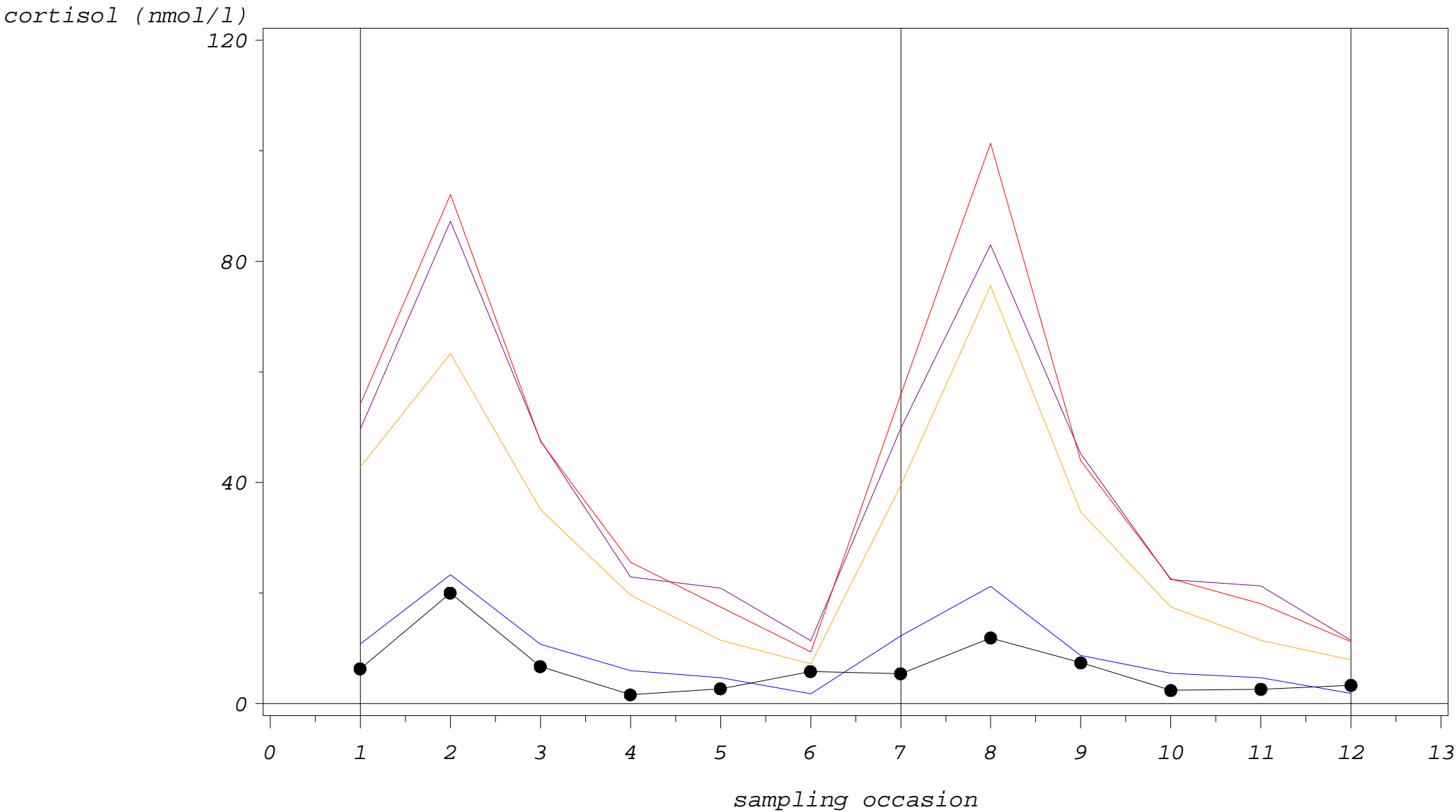
CODE=P00212



PLOT	●—●—●	Cortisol	—	Median	—	MW+(4*SD)
	—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

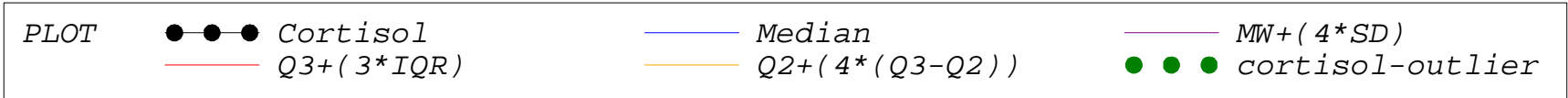
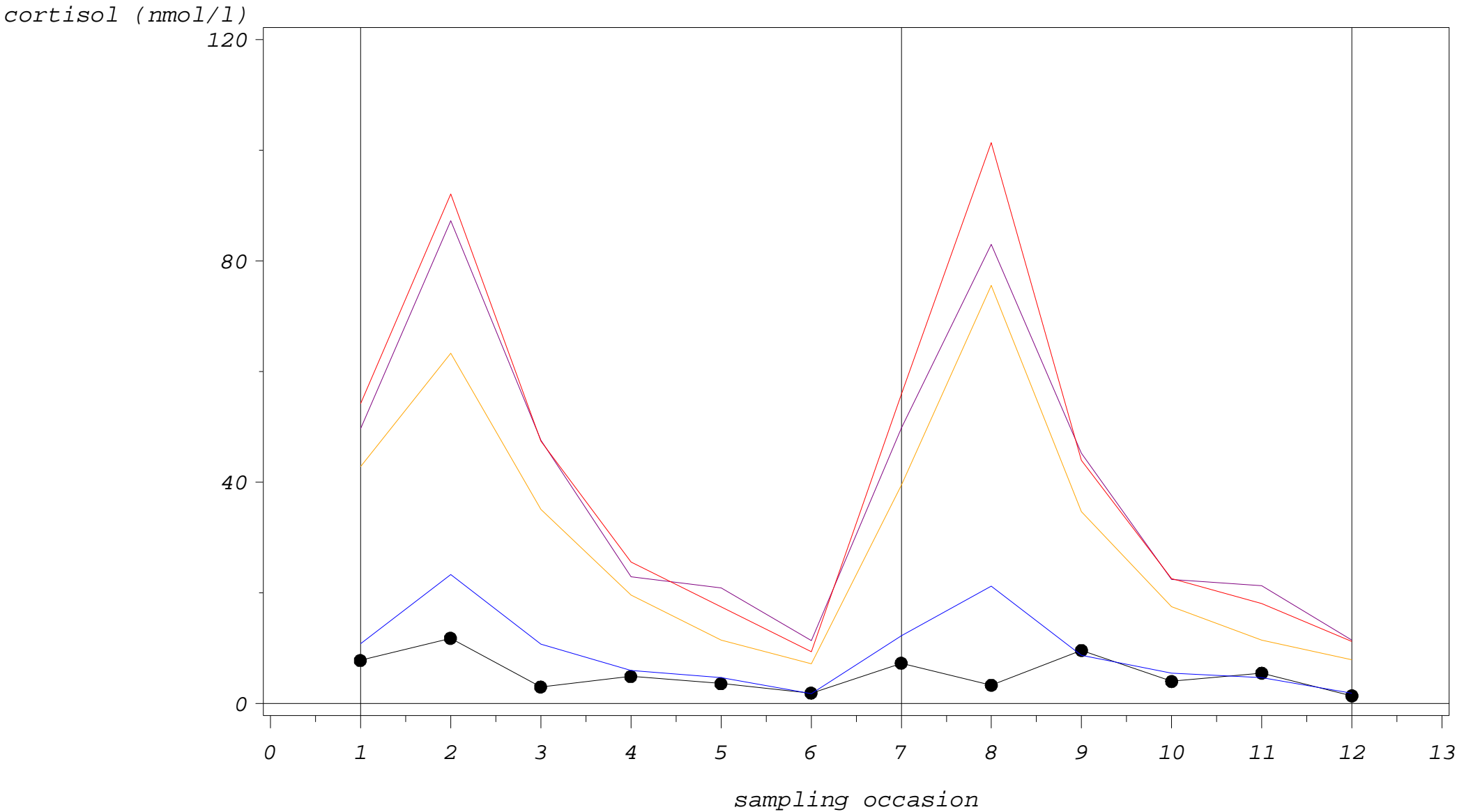
Study 1: cortisol single profiles with outlier fences

CODE=P00213



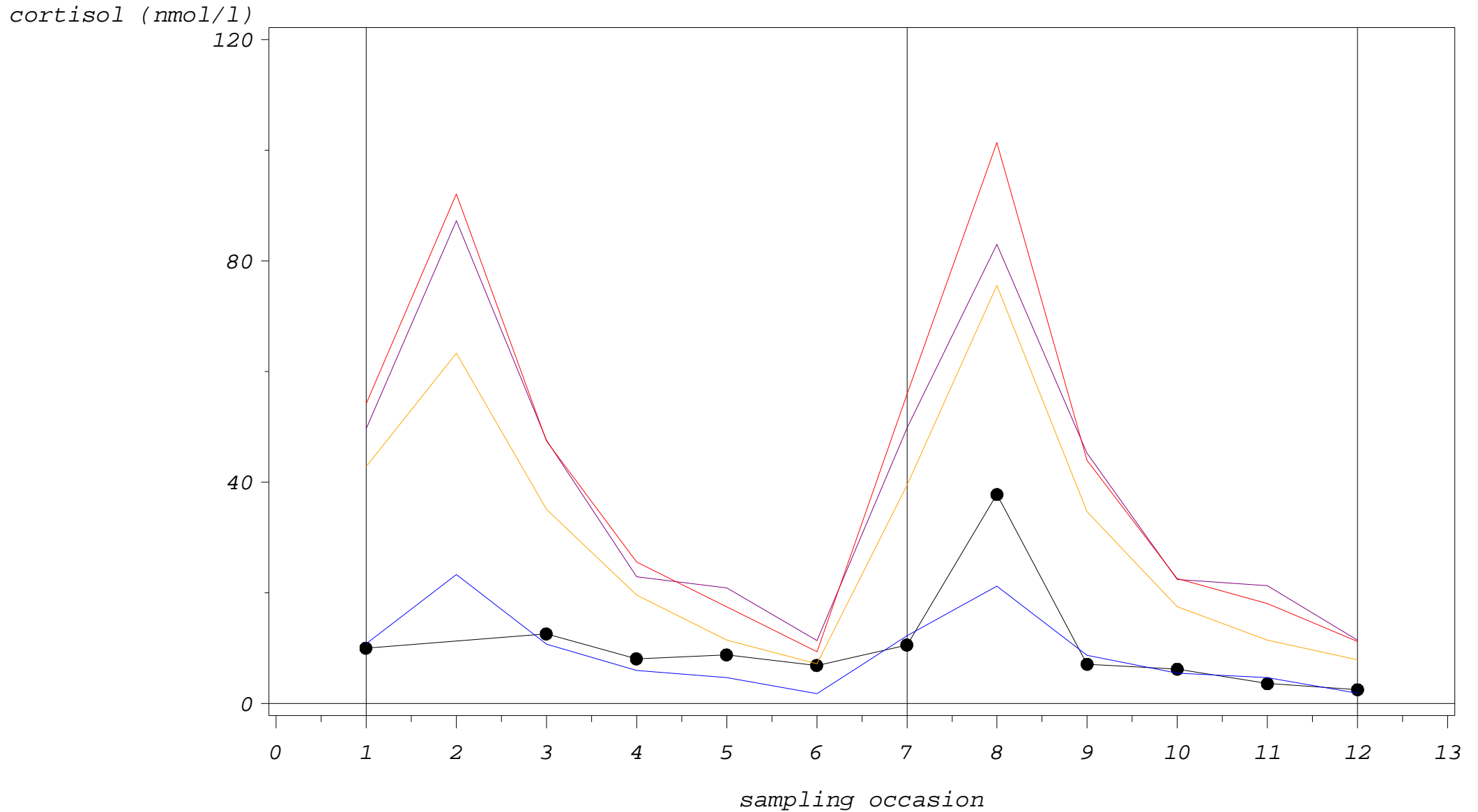
Study 1: cortisol single profiles with outlier fences

CODE=P00214



Study 1: cortisol single profiles with outlier fences

CODE=P00215



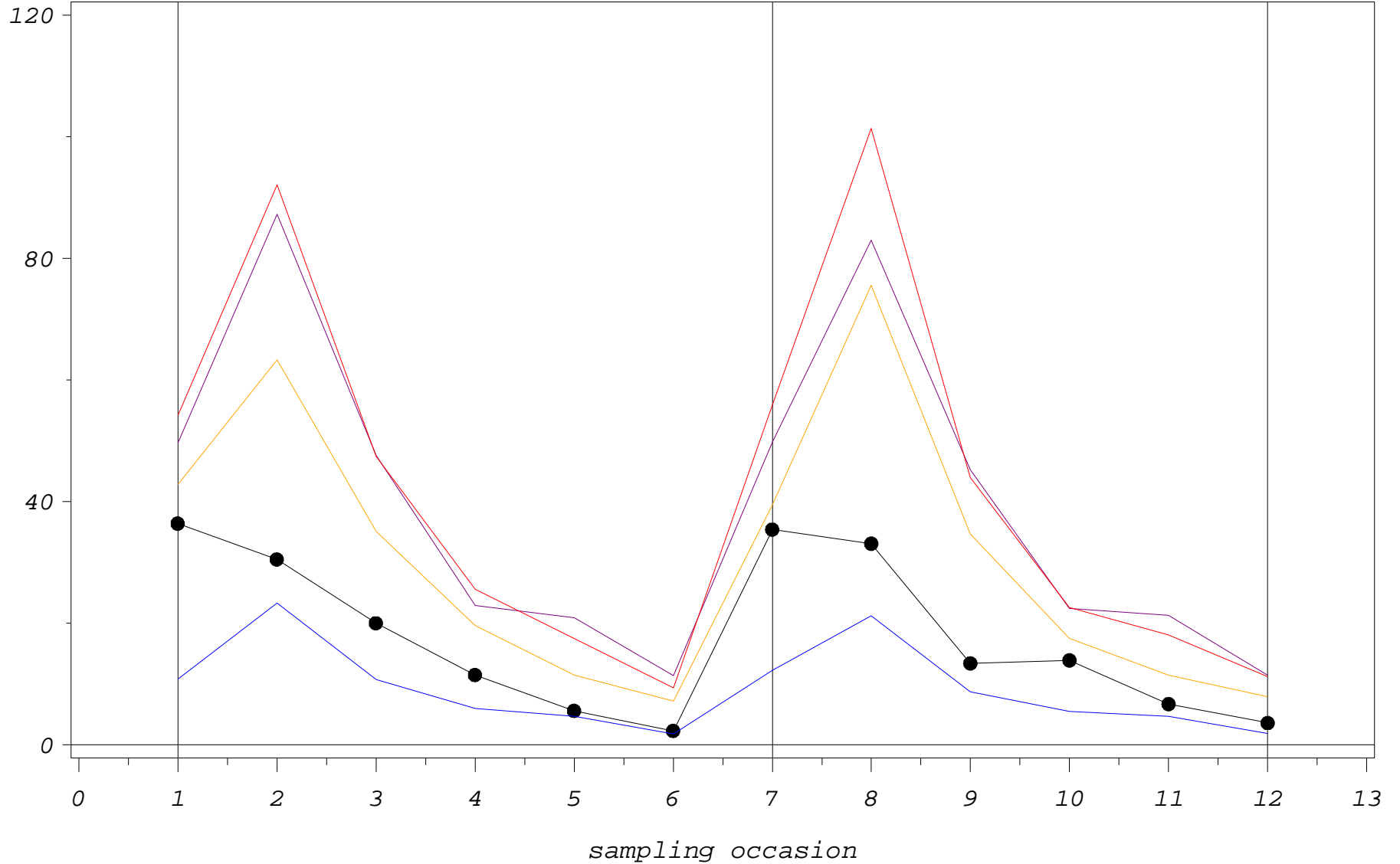
PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 1: cortisol single profiles with outlier fences

CODE=P00216

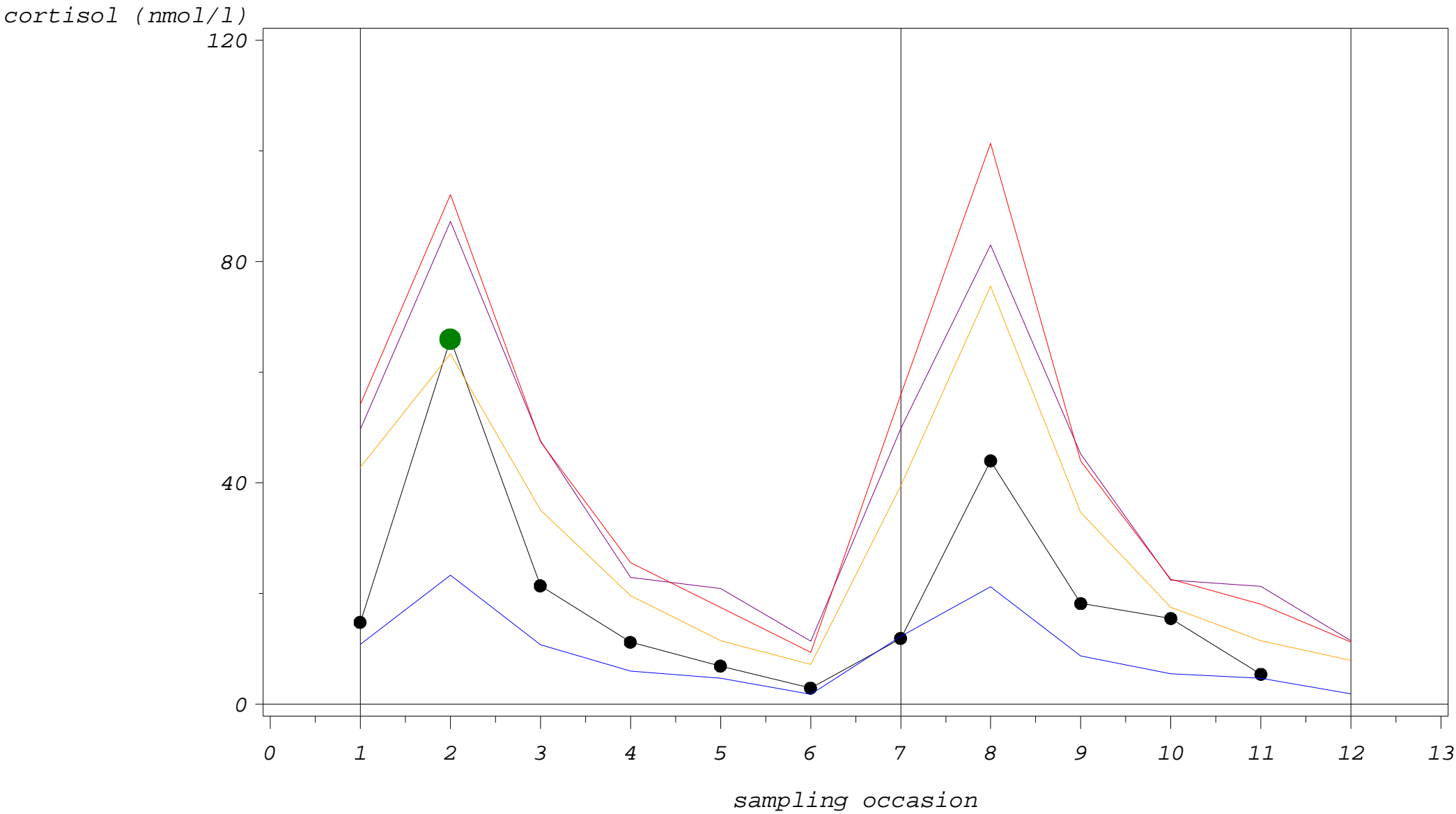
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

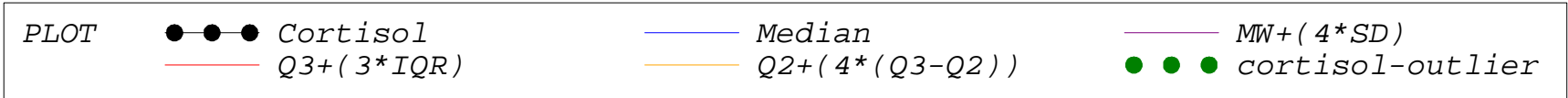
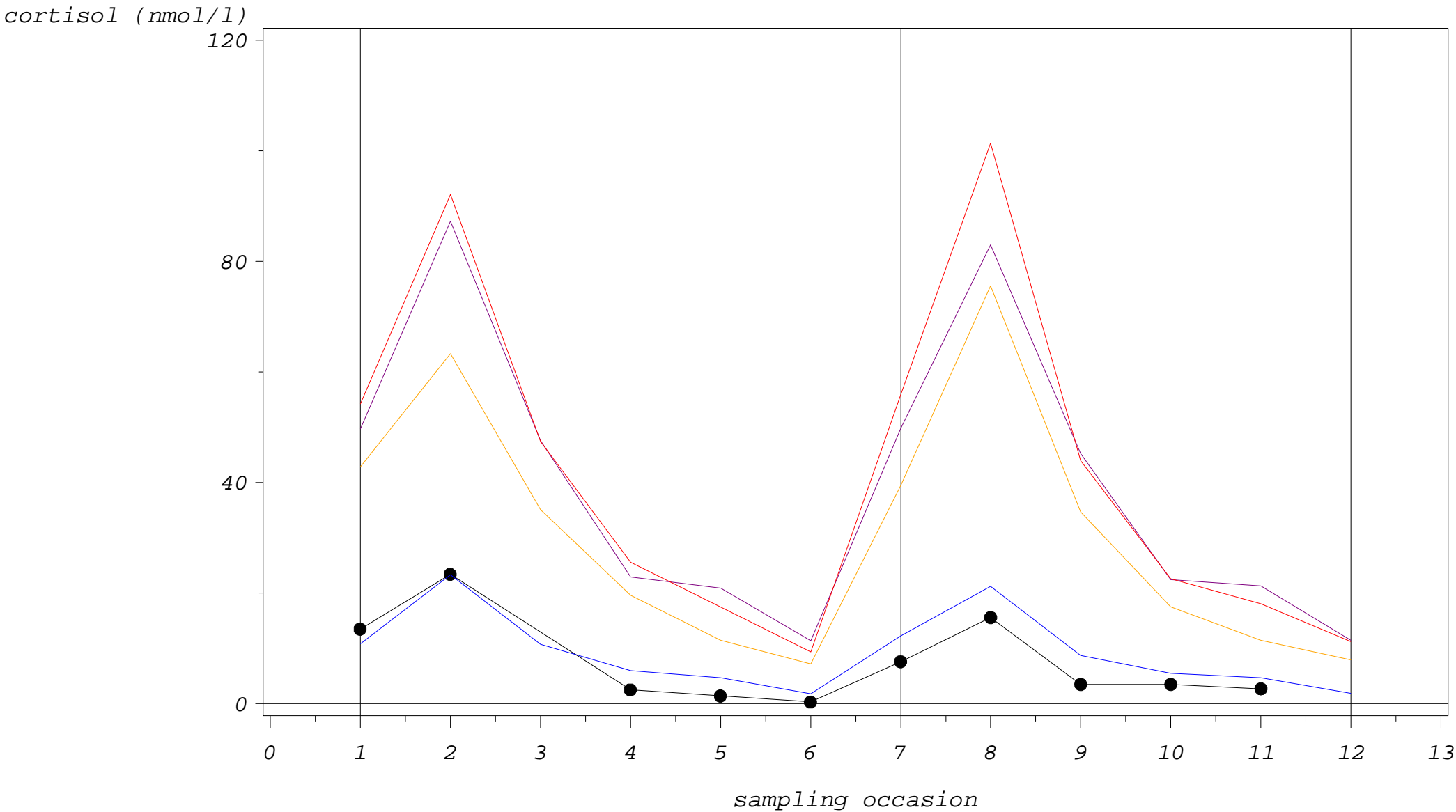
Study 1: cortisol single profiles with outlier fences

CODE=P00217



Study 1: cortisol single profiles with outlier fences

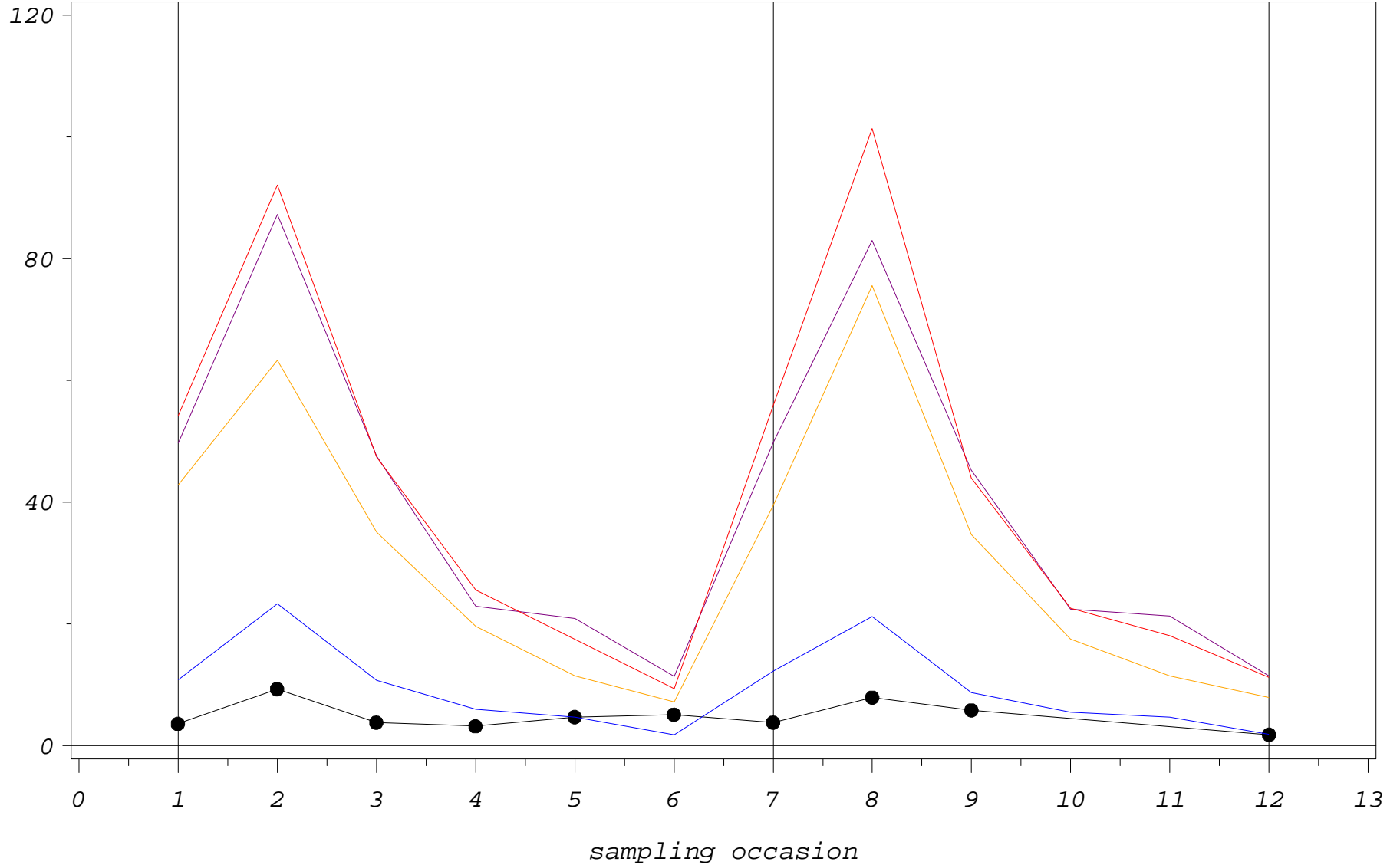
CODE=P00301



Study 1: cortisol single profiles with outlier fences

CODE=P00302

cortisol (nmol/l)



PLOT

●—●—● Cortisol
— $Q3 + (3 \times IQR)$

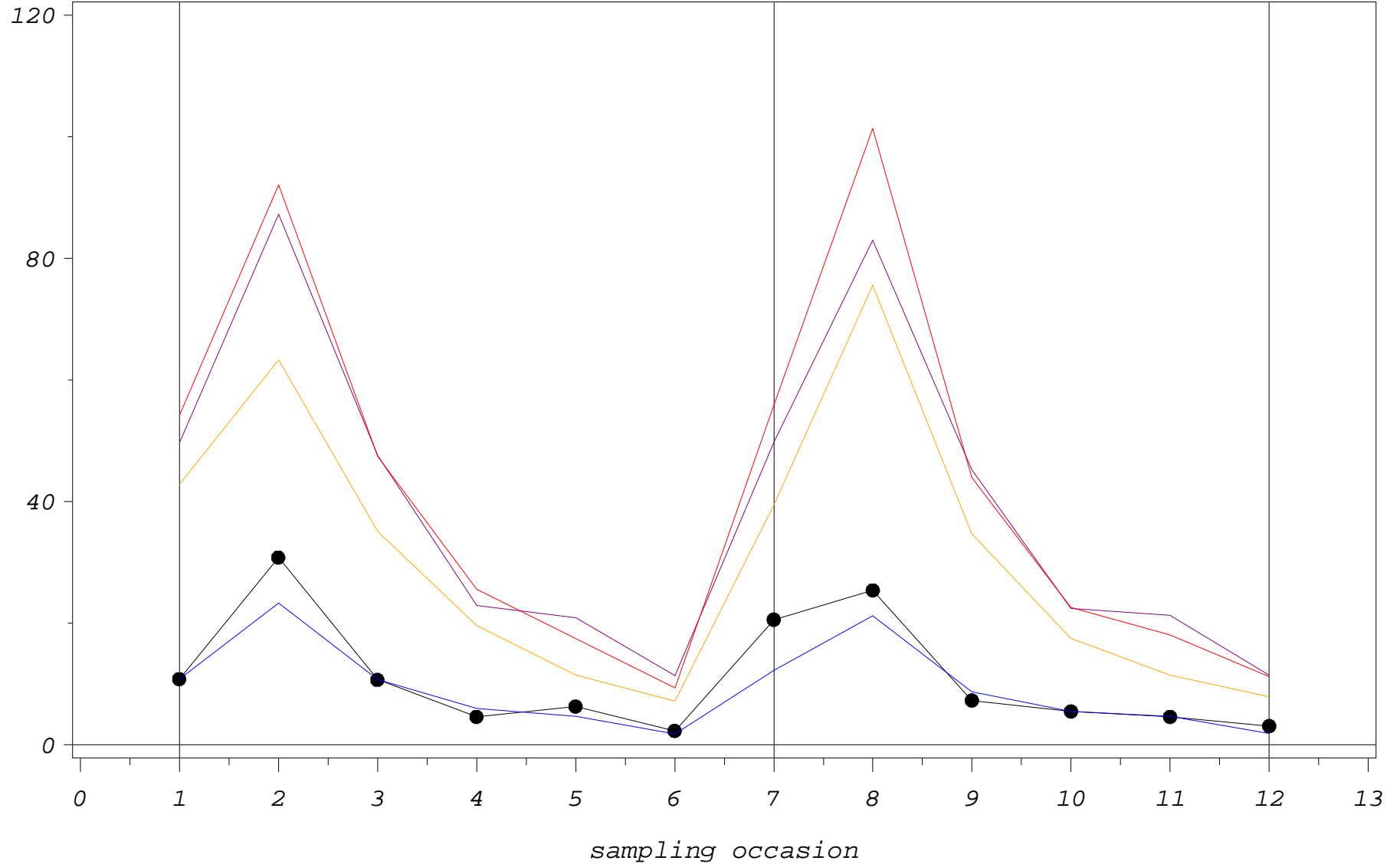
— Median
— $Q2 + (4 \times (Q3 - Q2))$

— $MW + (4 \times SD)$
● ● ● cortisol-outlier

Study 1: cortisol single profiles with outlier fences

CODE=P00304

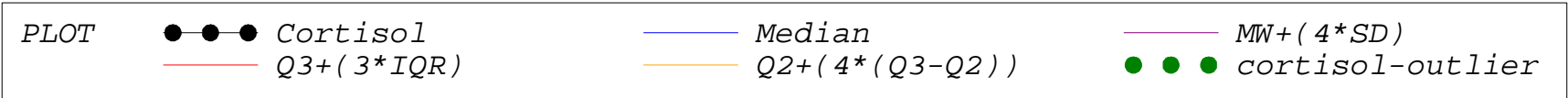
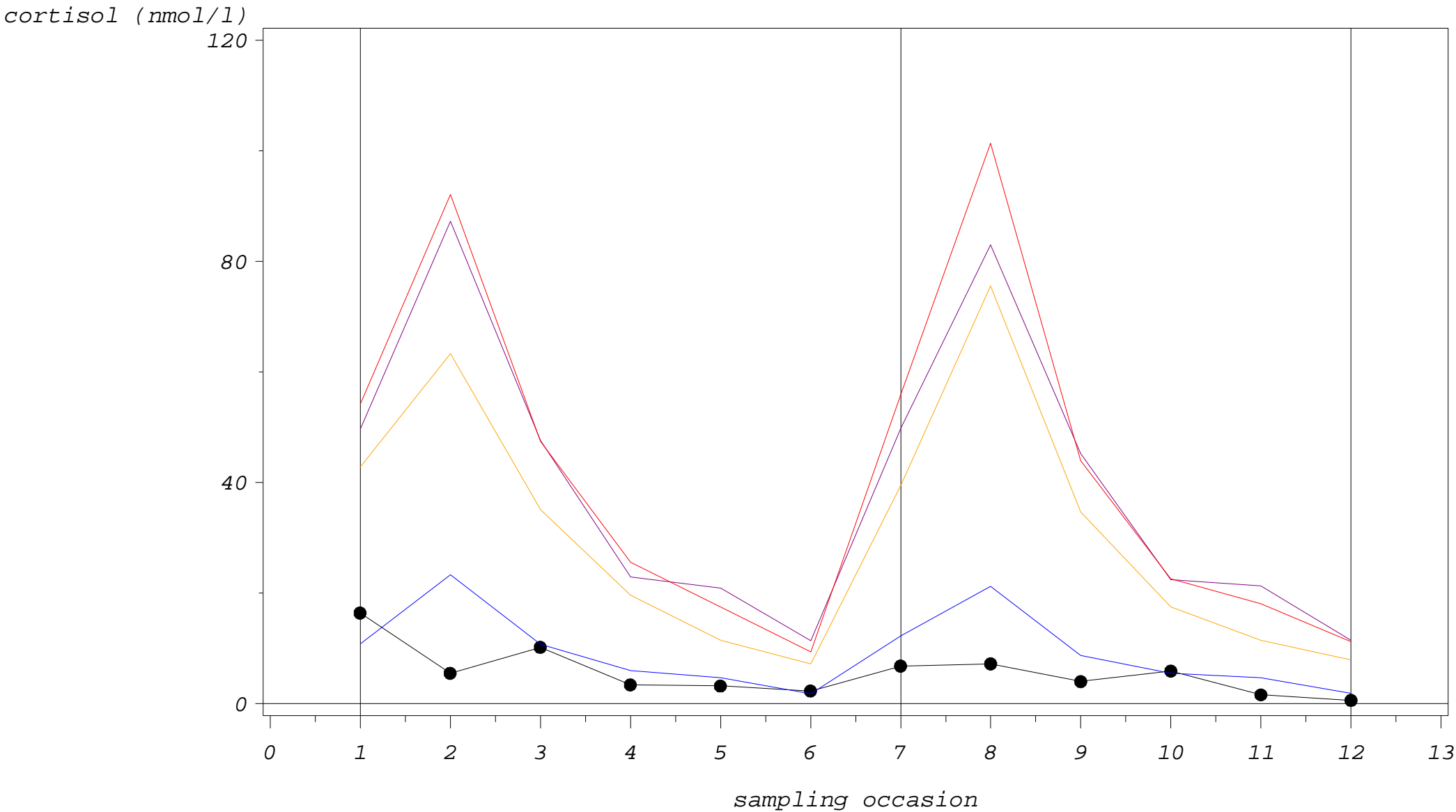
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW+(4*SD)$
 — $Q3+(3*IQR)$ — $Q2+(4*(Q3-Q2))$ ● ● ● cortisol-outlier

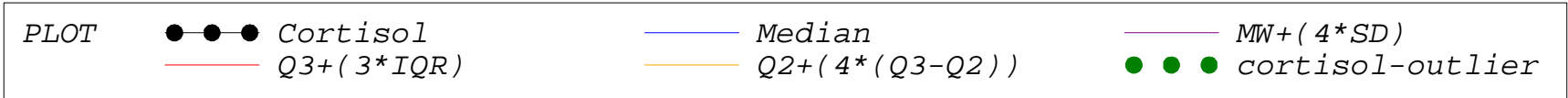
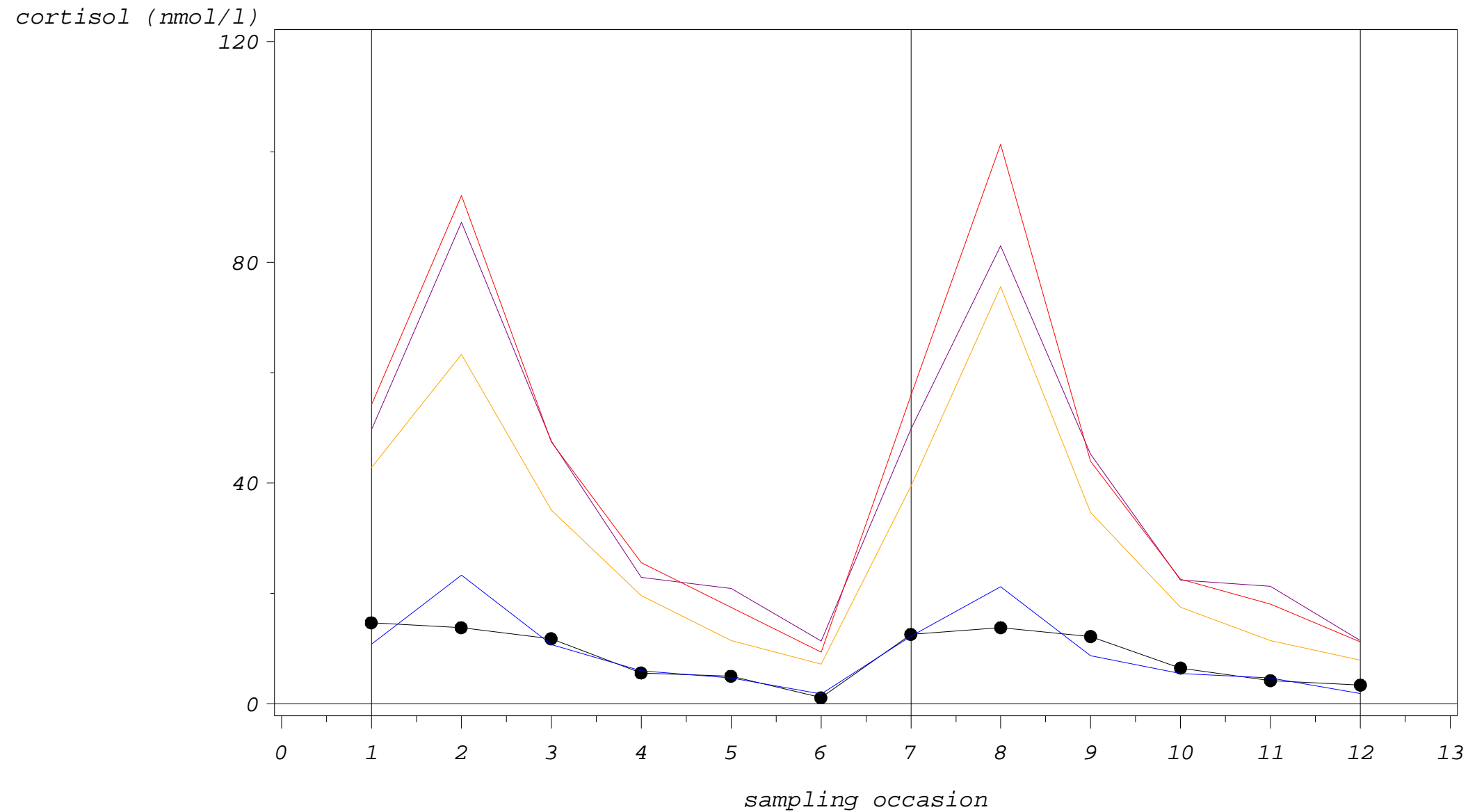
Study 1: cortisol single profiles with outlier fences

CODE=P00305



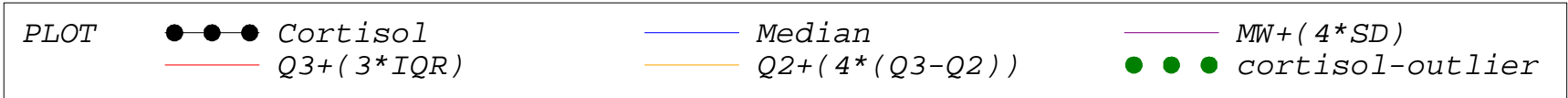
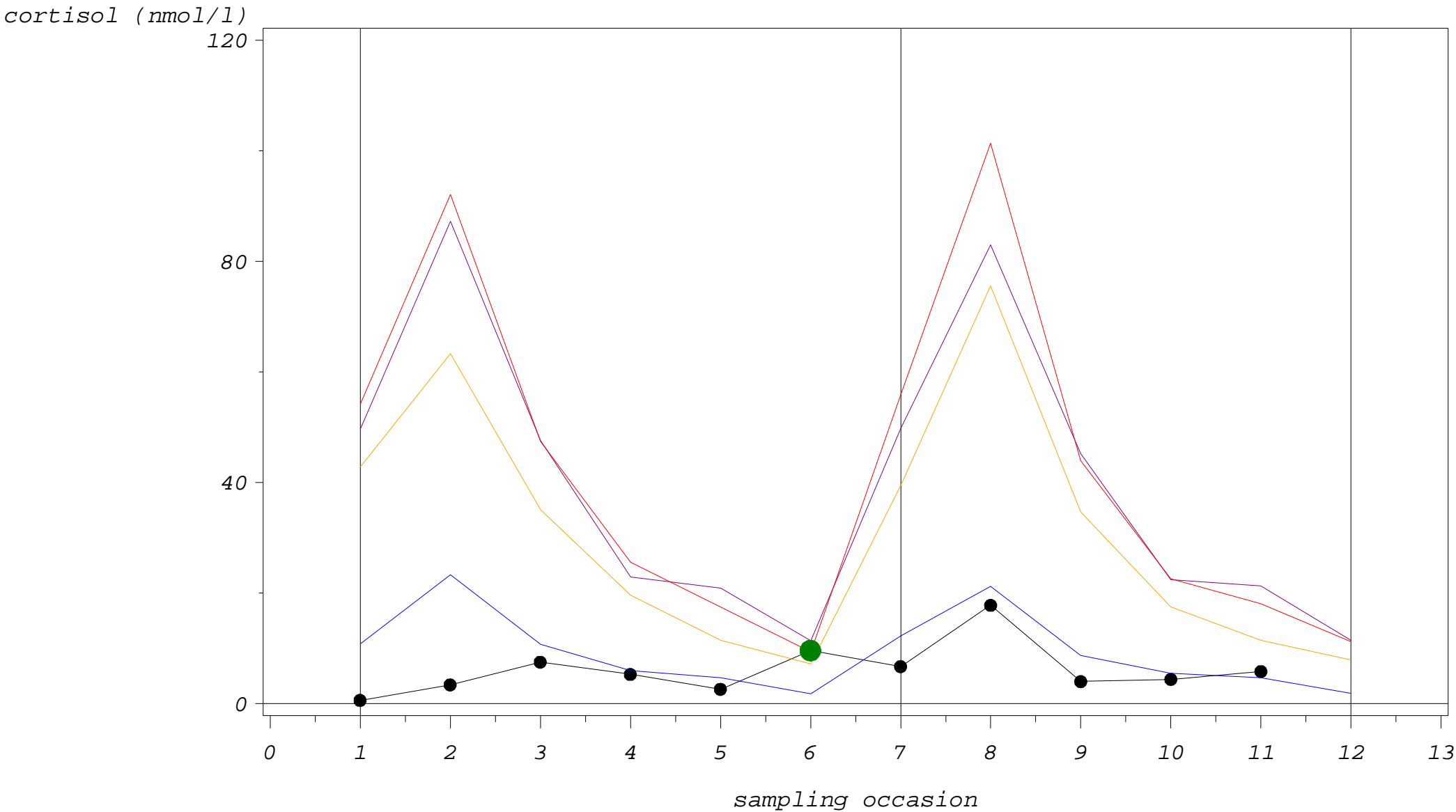
Study 1: cortisol single profiles with outlier fences

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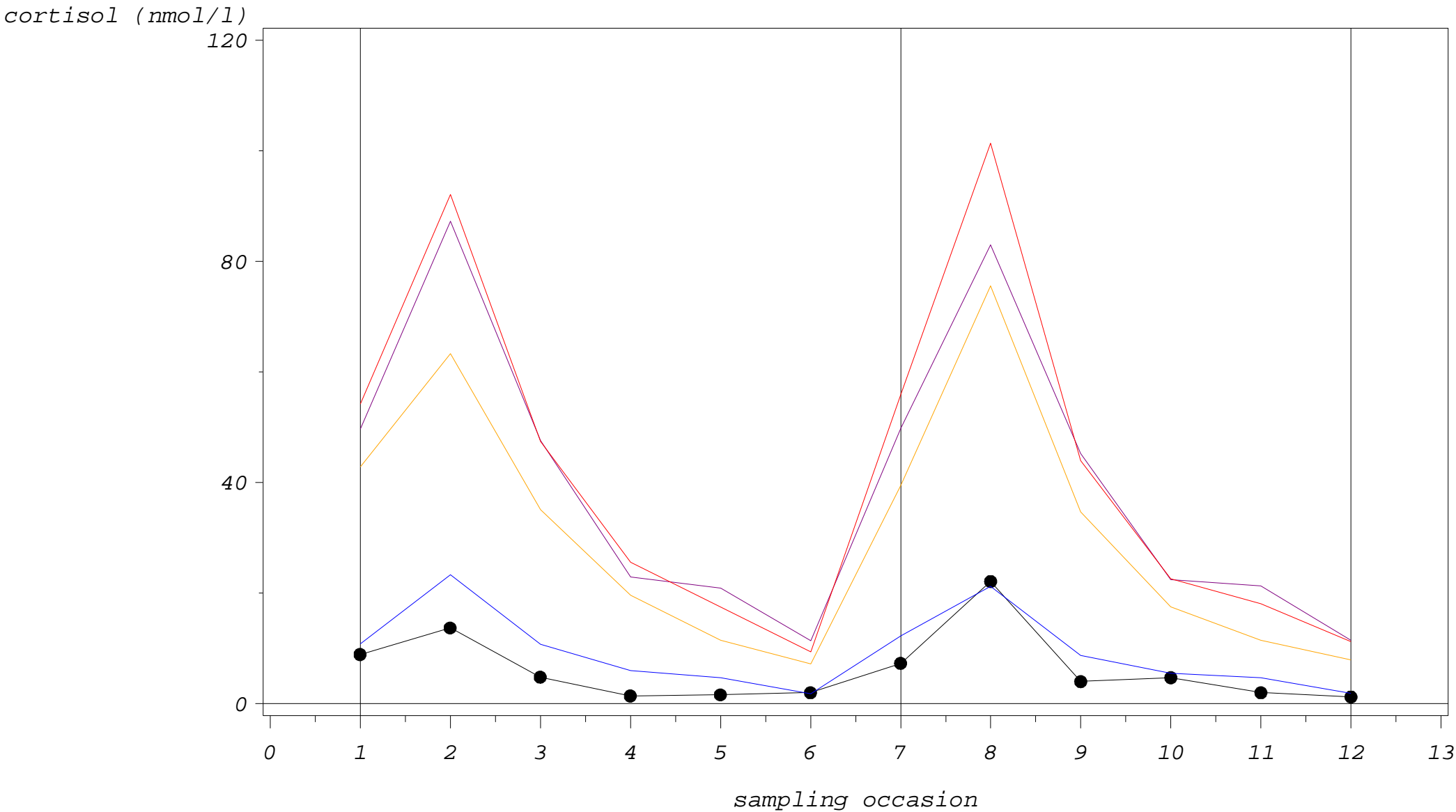
Study 1: cortisol single profiles with outlier fences

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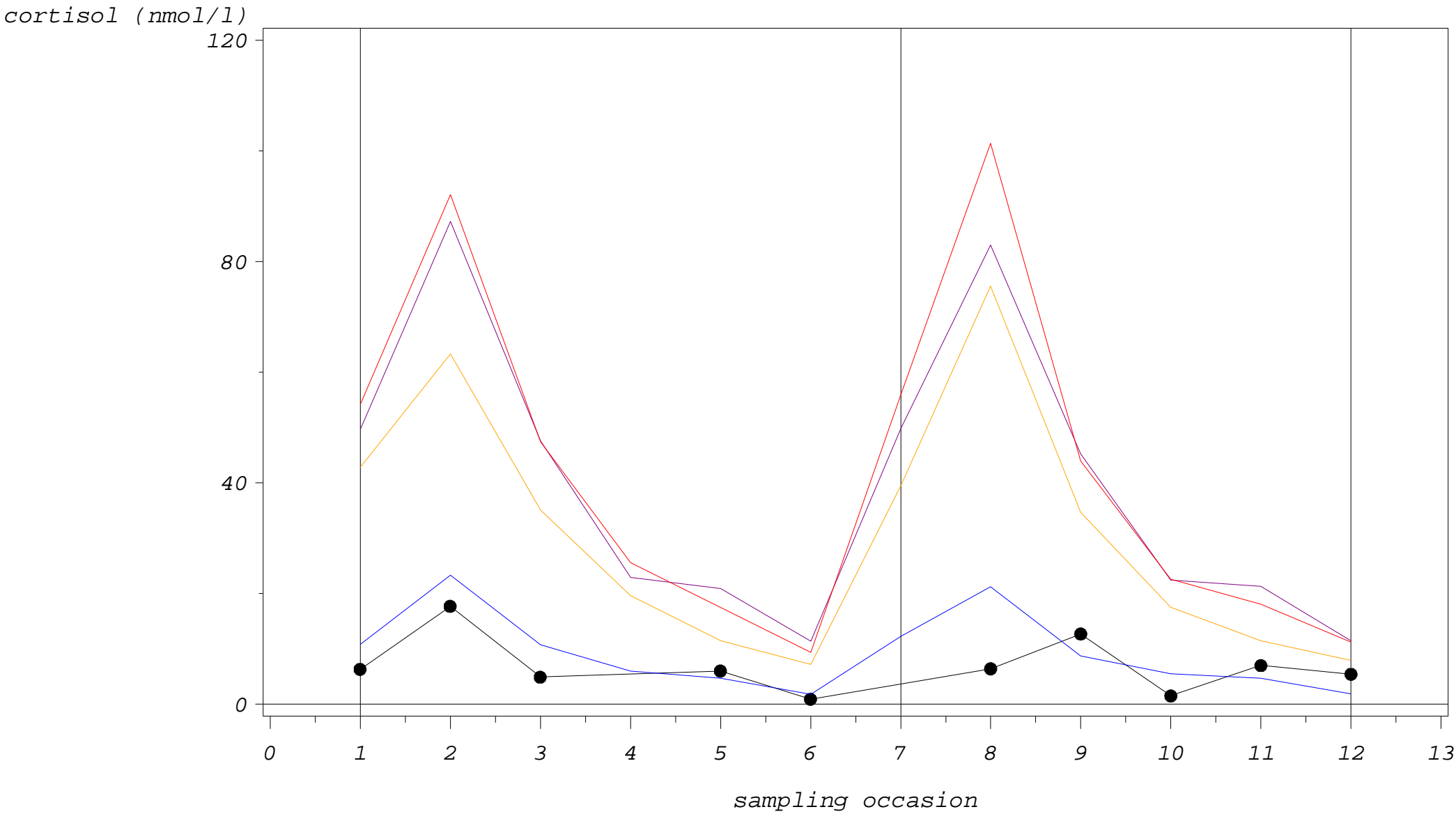
Study 1: cortisol single profiles with outlier fences

CODE=P00308



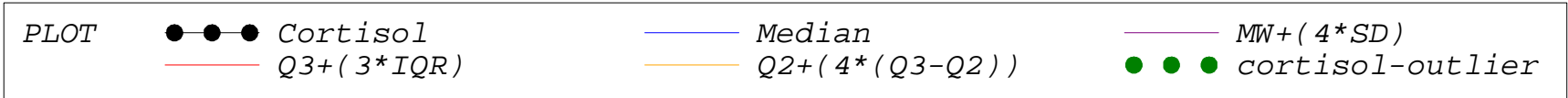
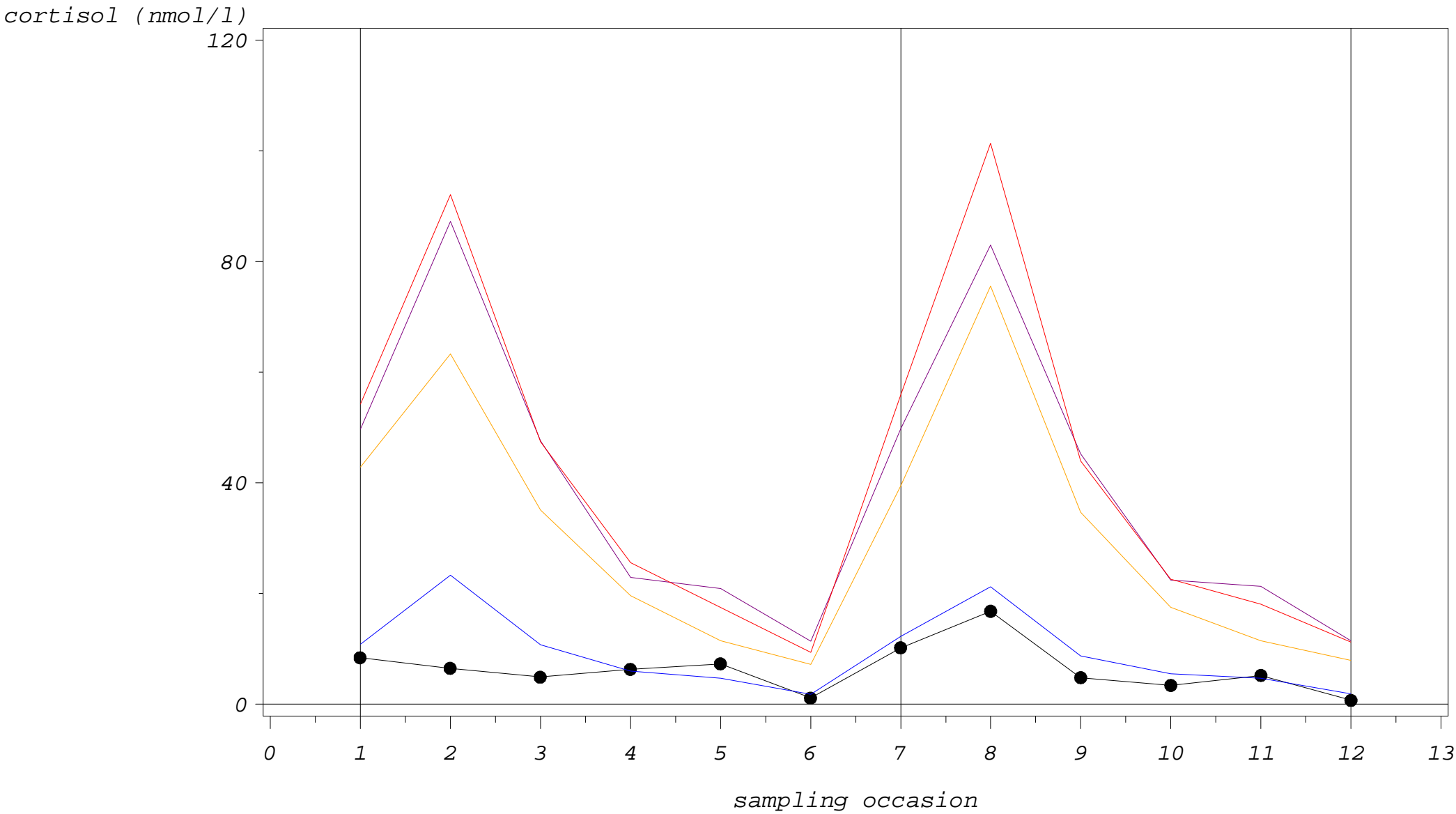
Study 1: cortisol single profiles with outlier fences

CODE=P00309



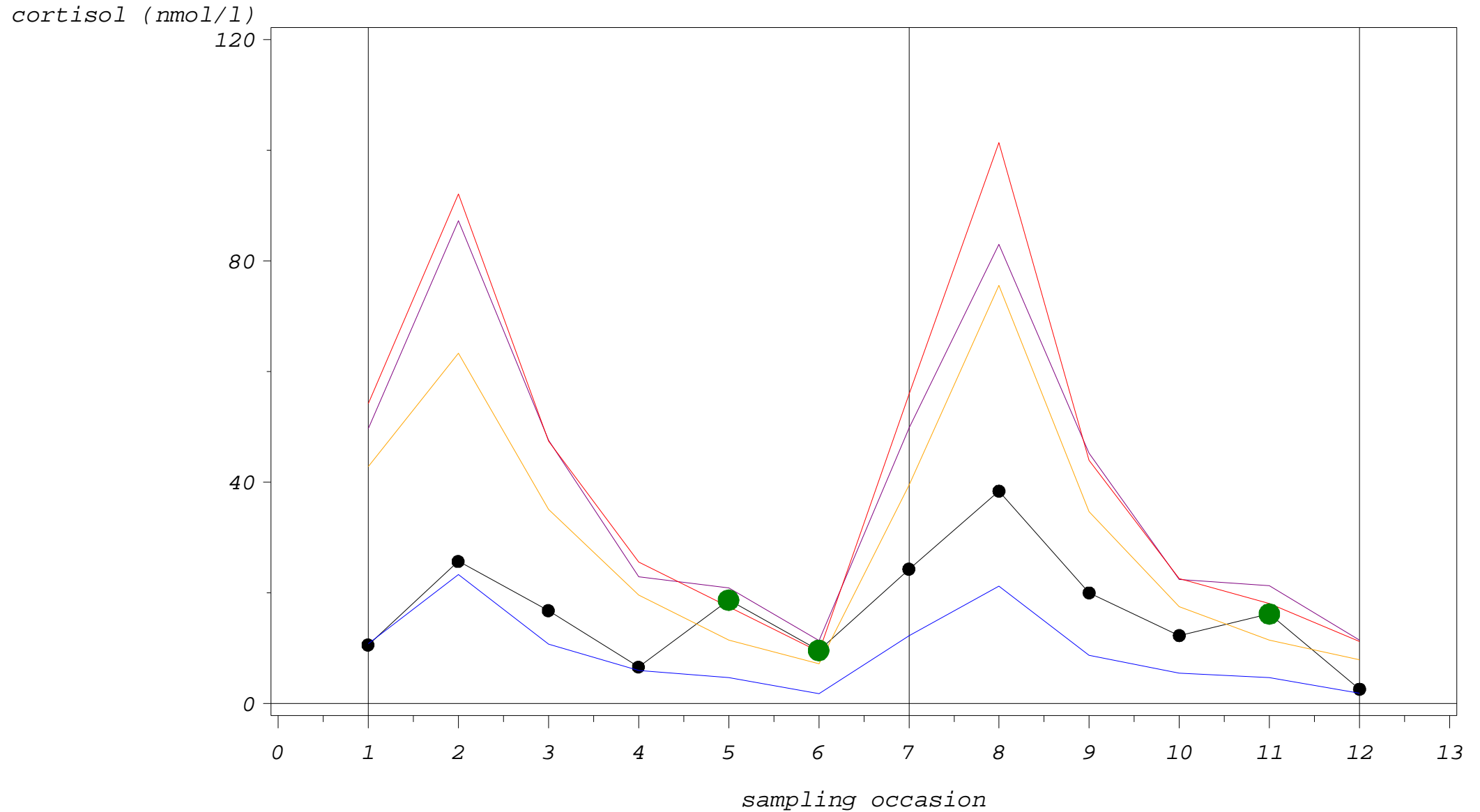
Study 1: cortisol single profiles with outlier fences

CODE=P00401



Study 1: cortisol single profiles with outlier fences

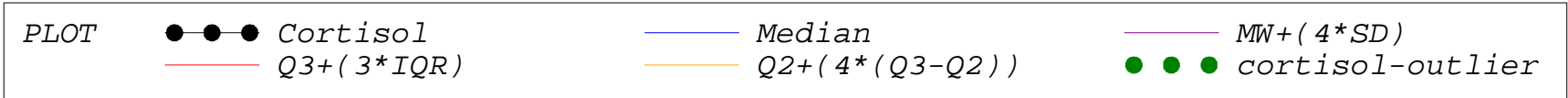
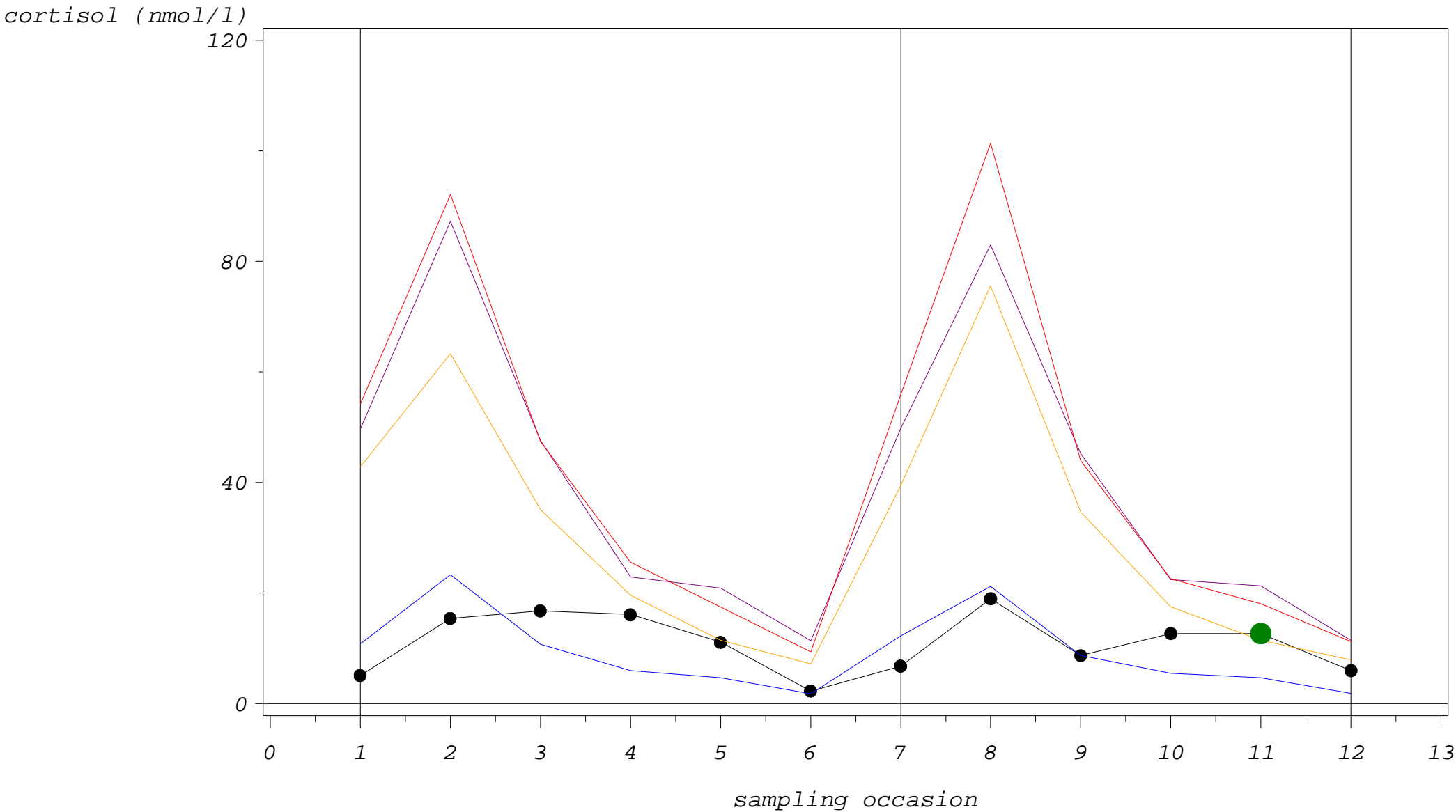
CODE=P00402



PLOT	●—●—●	Cortisol	—	Median	—	MW+(4*SD)
	—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●—●—●	cortisol-outlier

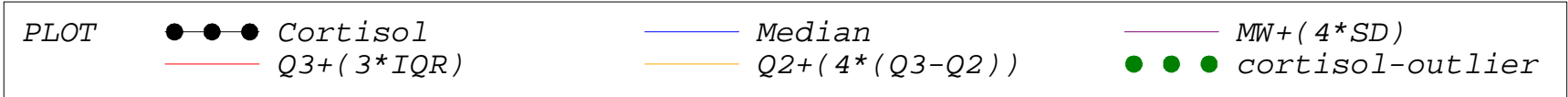
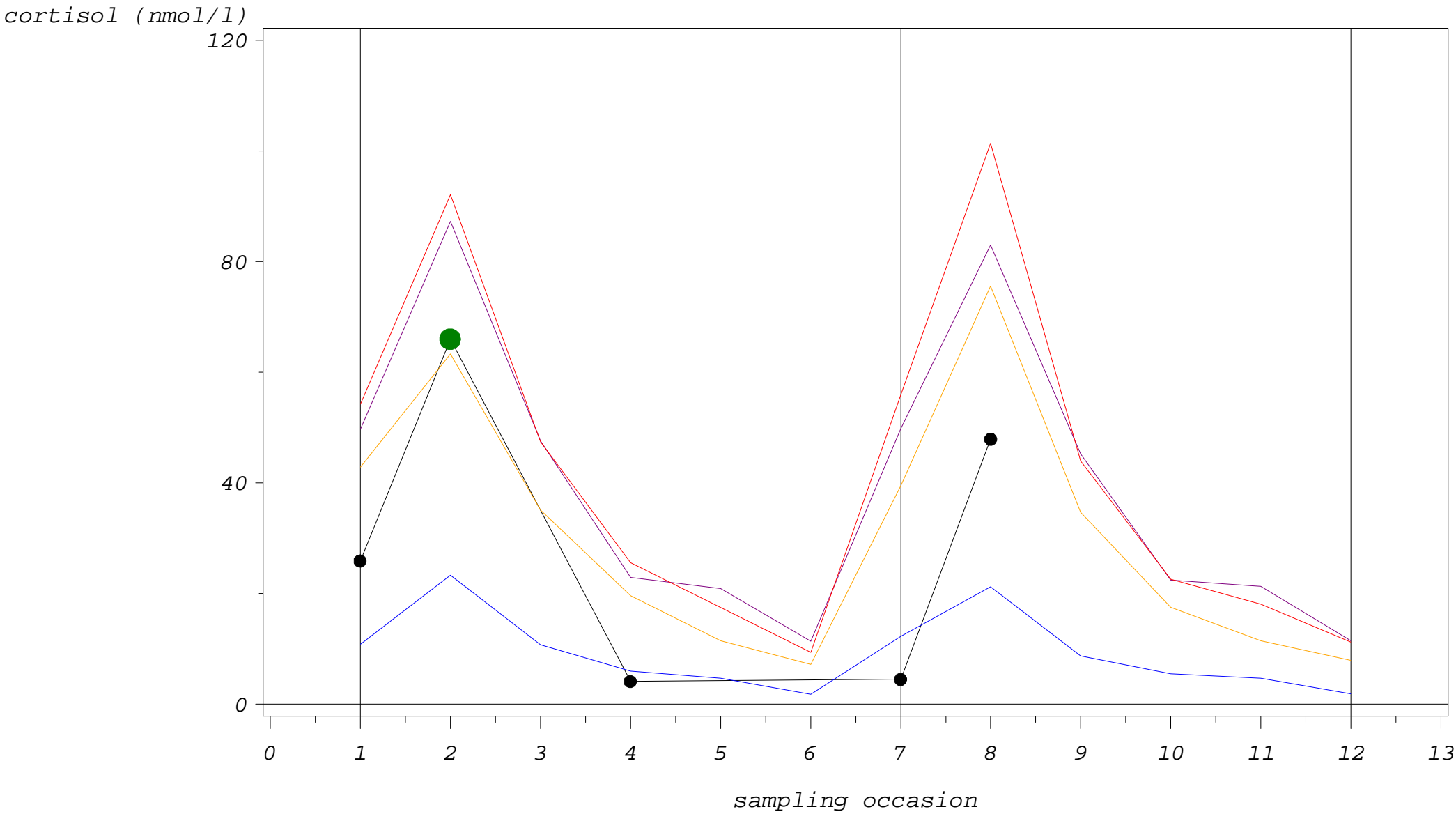
Study 1: cortisol single profiles with outlier fences

CODE=P00403



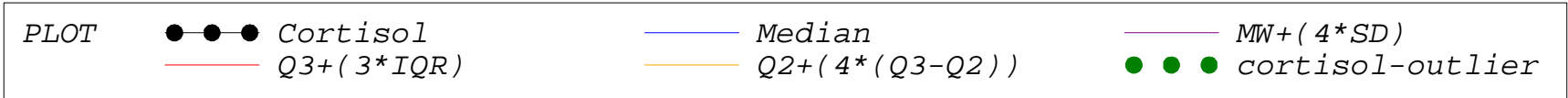
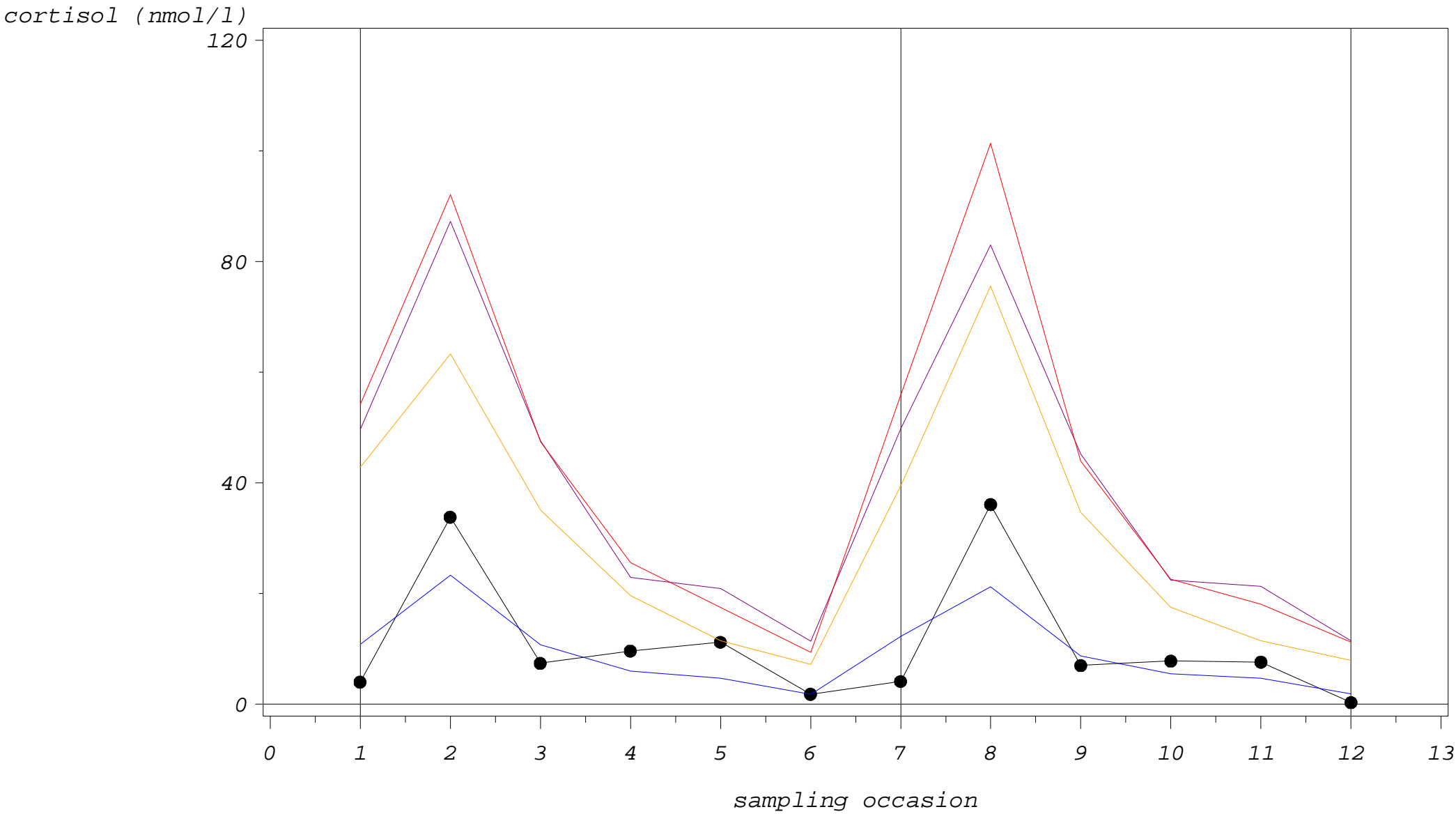
Study 1: cortisol single profiles with outlier fences

CODE=P00506



Study 1: cortisol single profiles with outlier fences

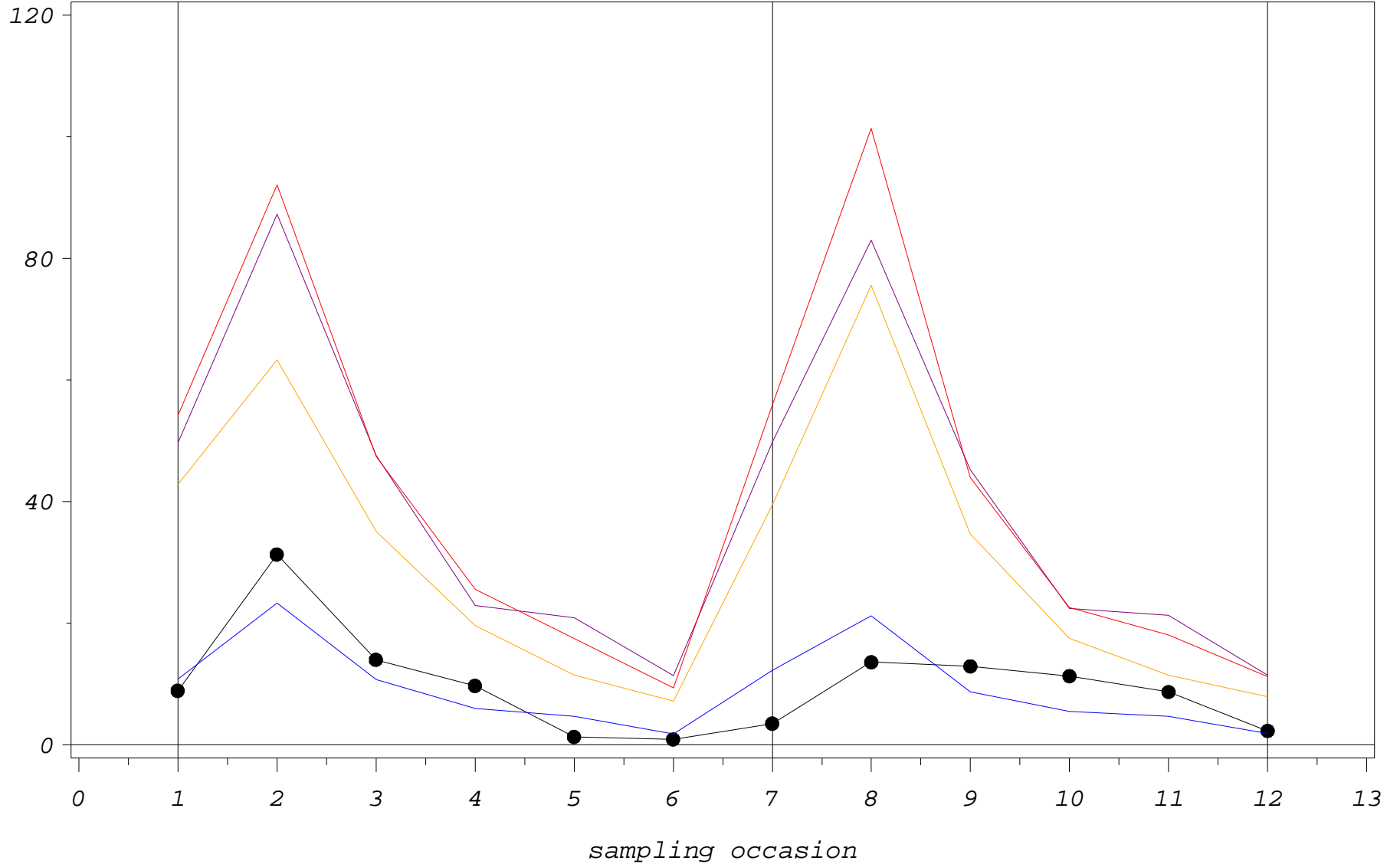
CODE=P00508



Study 1: cortisol single profiles with outlier fences

CODE=P00509

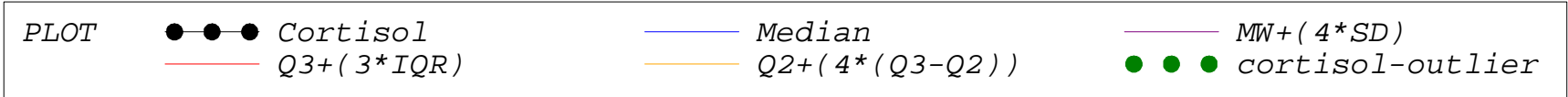
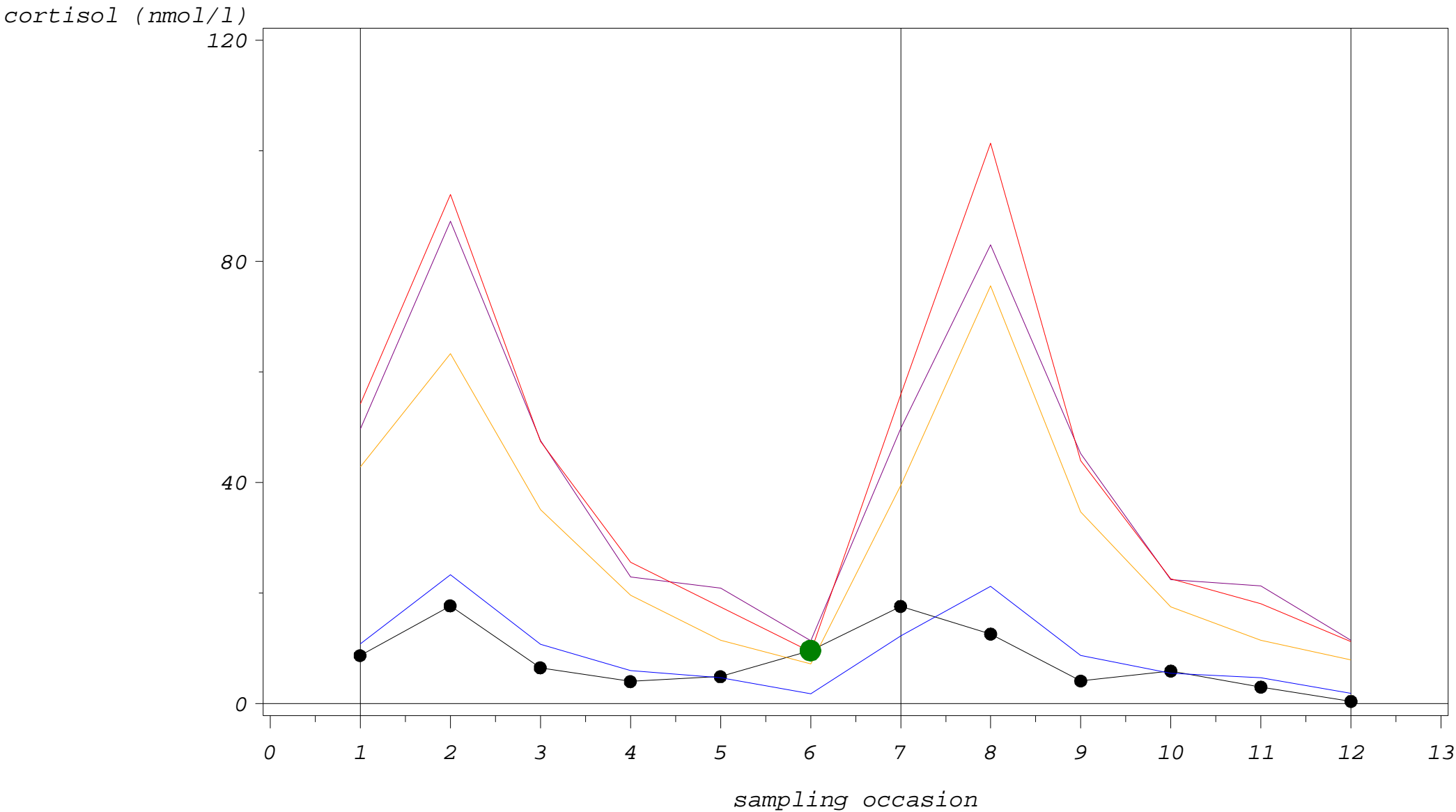
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 \cdot SD)$
 — $Q3 + (3 \cdot IQR)$ — $Q2 + (4 \cdot (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 1: cortisol single profiles with outlier fences

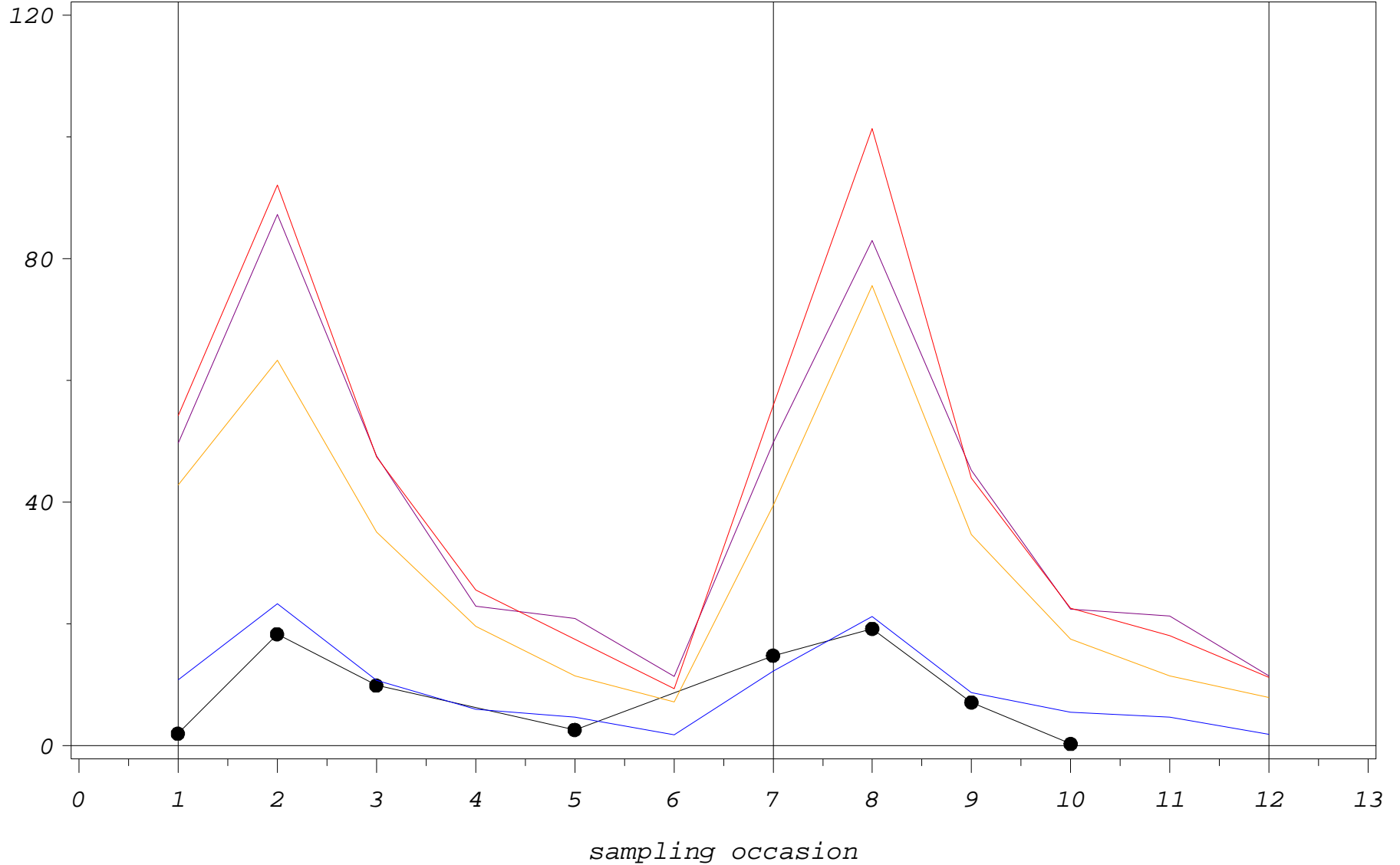
CODE=P00510



Study 1: cortisol single profiles with outlier fences

CODE=P00511

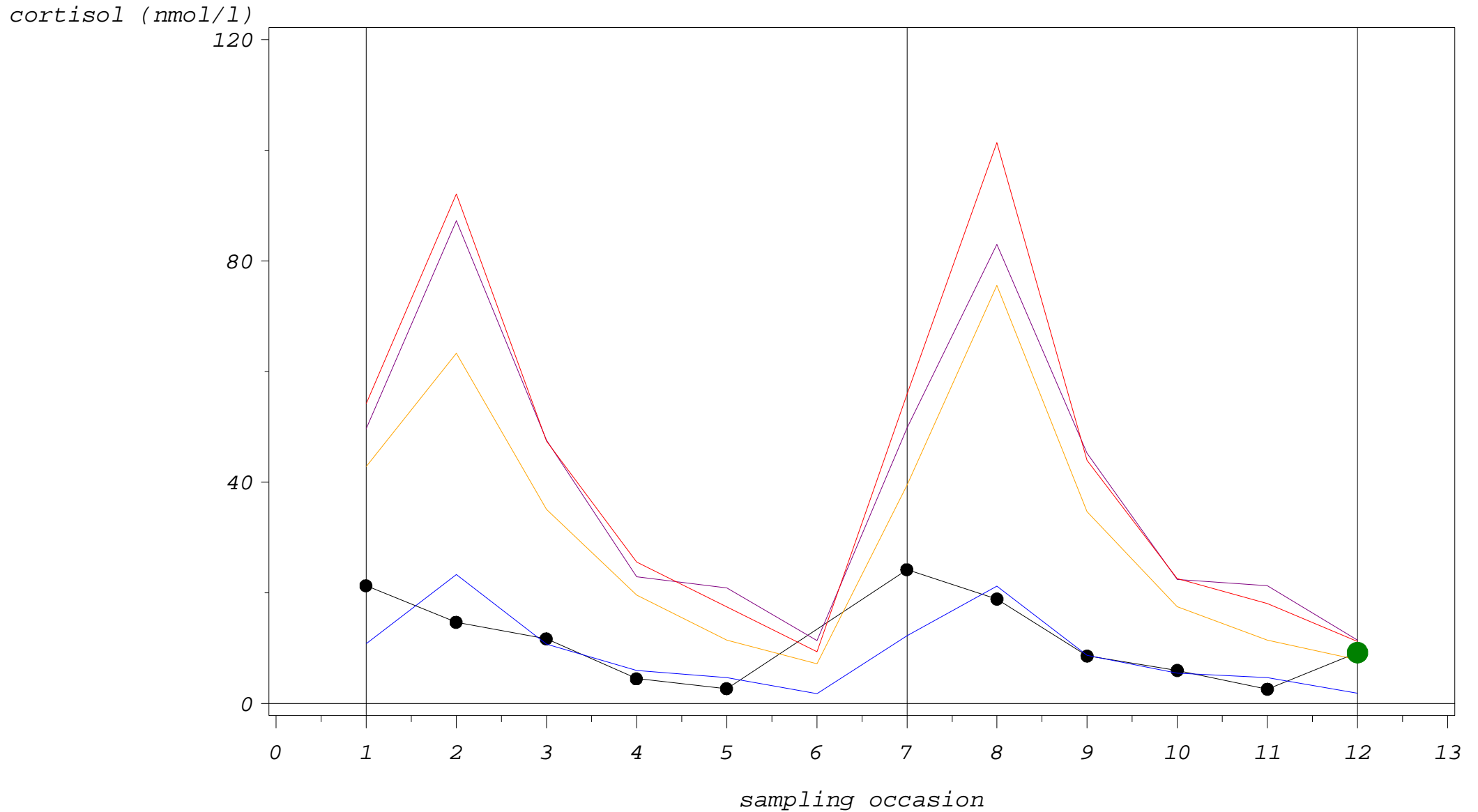
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ●●● cortisol-outlier

Study 1: cortisol single profiles with outlier fences

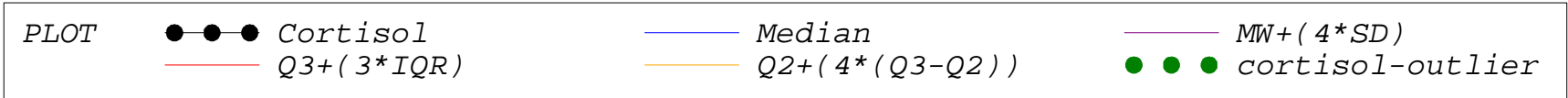
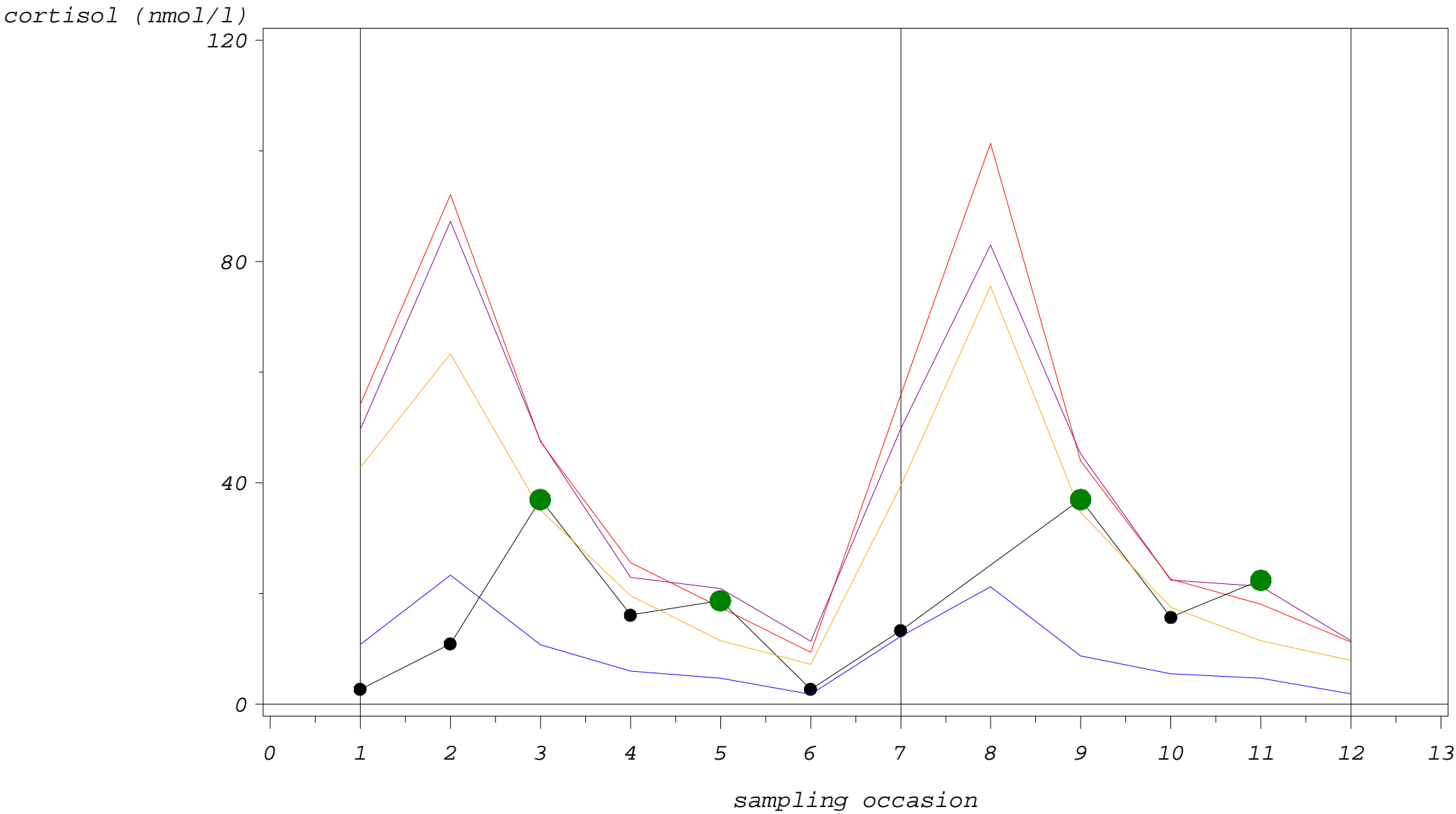
CODE=P00513



PLOT	●—●—●	Cortisol	—	Median	—	$MW + (4 \times SD)$
	—	$Q3 + (3 \times IQR)$	—	$Q2 + (4 \times (Q3 - Q2))$	●—●—●	cortisol-outlier

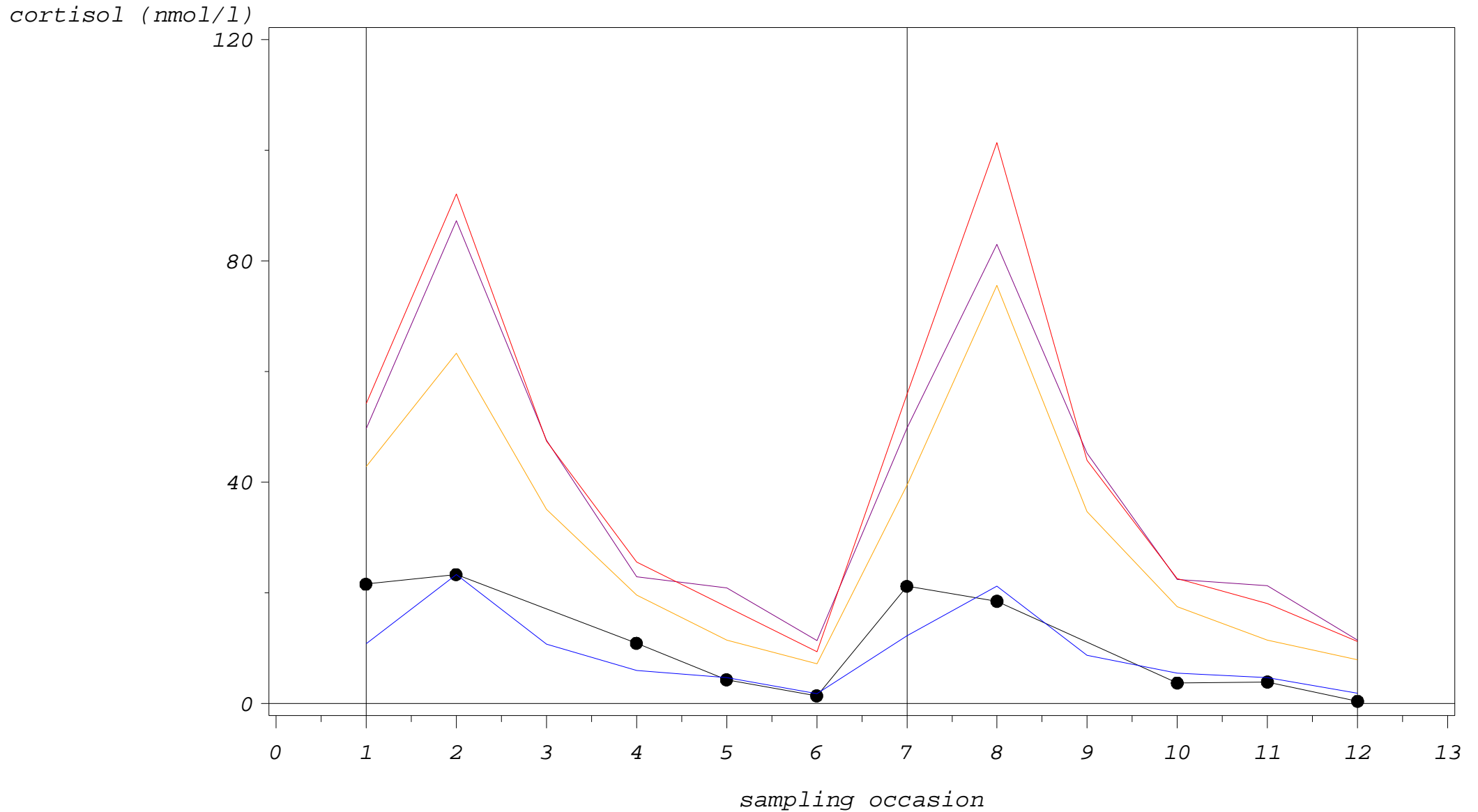
Study 1: cortisol single profiles with outlier fences

CODE=P00514



Study 1: cortisol single profiles with outlier fences

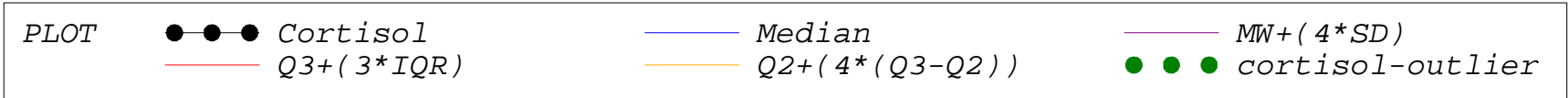
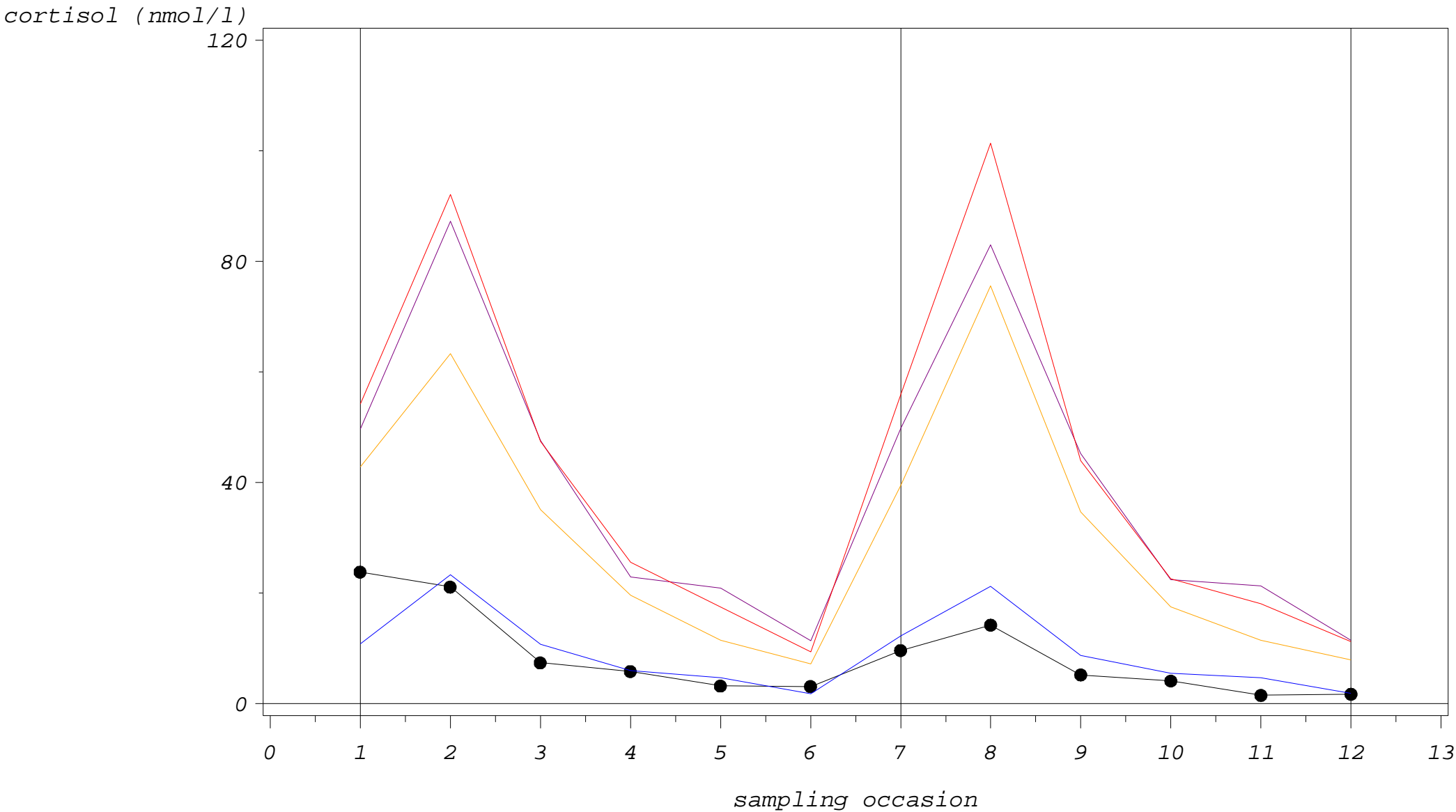
CODE=P00515



PLOT	●—●—● Cortisol	— Median	— MW+(4*SD)
	— Q3+(3*IQR)	— Q2+(4*(Q3-Q2))	● ● ● cortisol-outlier

Study 1: cortisol single profiles with outlier fences

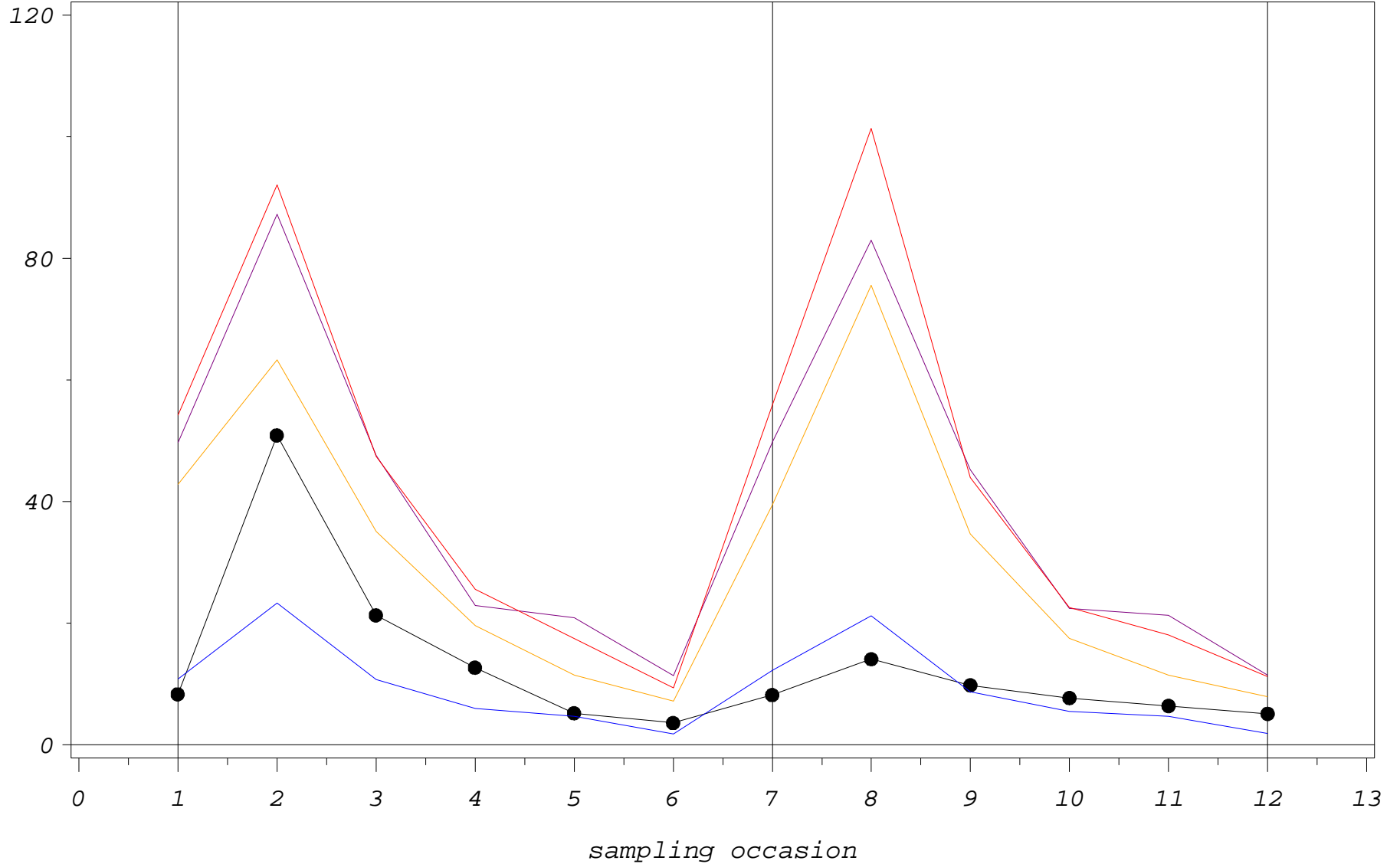
CODE=P00517



Study 1: cortisol single profiles with outlier fences

CODE=P00518

cortisol (nmol/l)

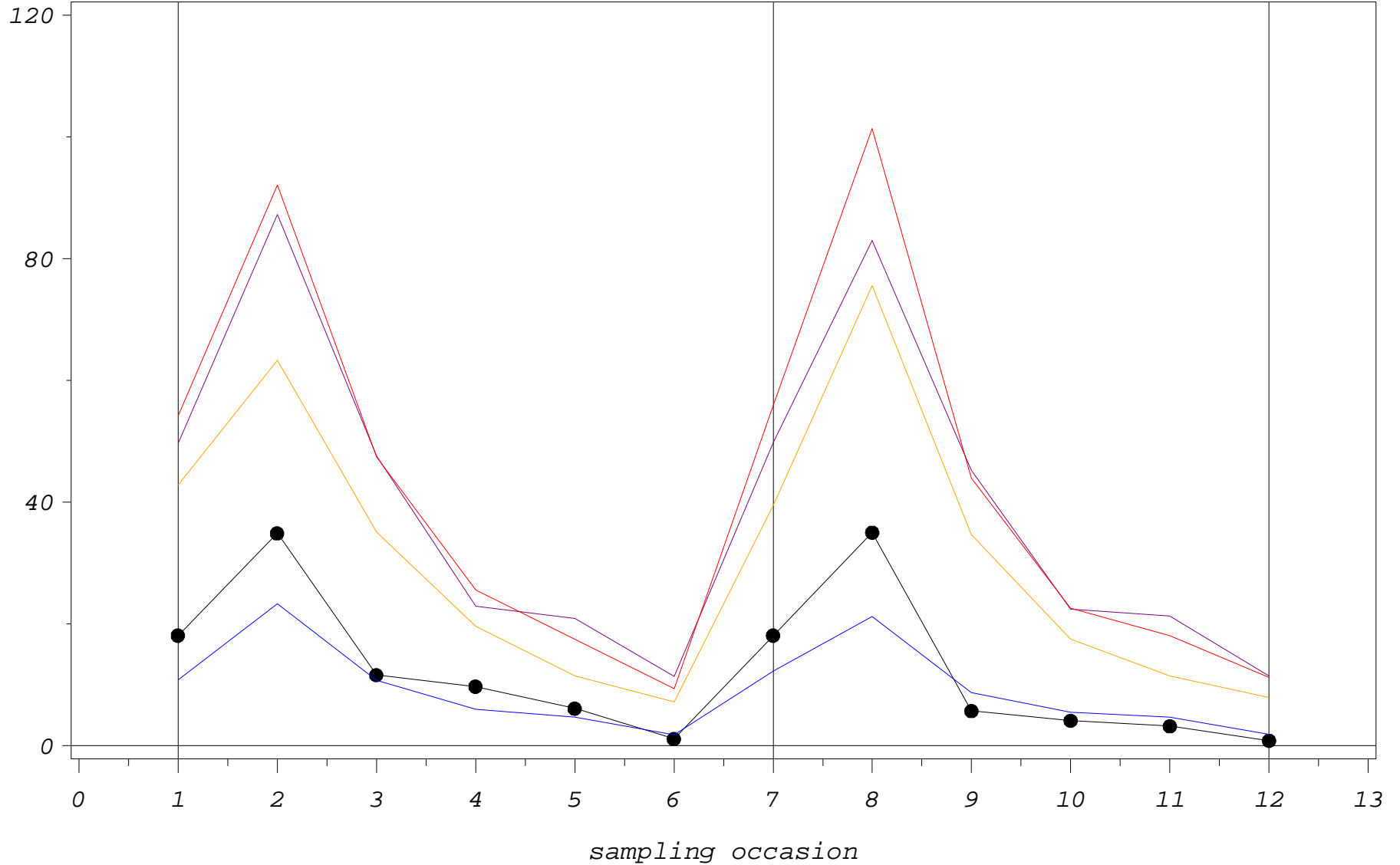


PLOT ●—●—● Cortisol — Median — $MW + (4 * SD)$
 — $Q3 + (3 * IQR)$ — $Q2 + (4 * (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 1: cortisol single profiles with outlier fences

CODE=P00519

cortisol (nmol/l)



PLOT

●—●—● Cortisol
— Q3+(3*IQR)

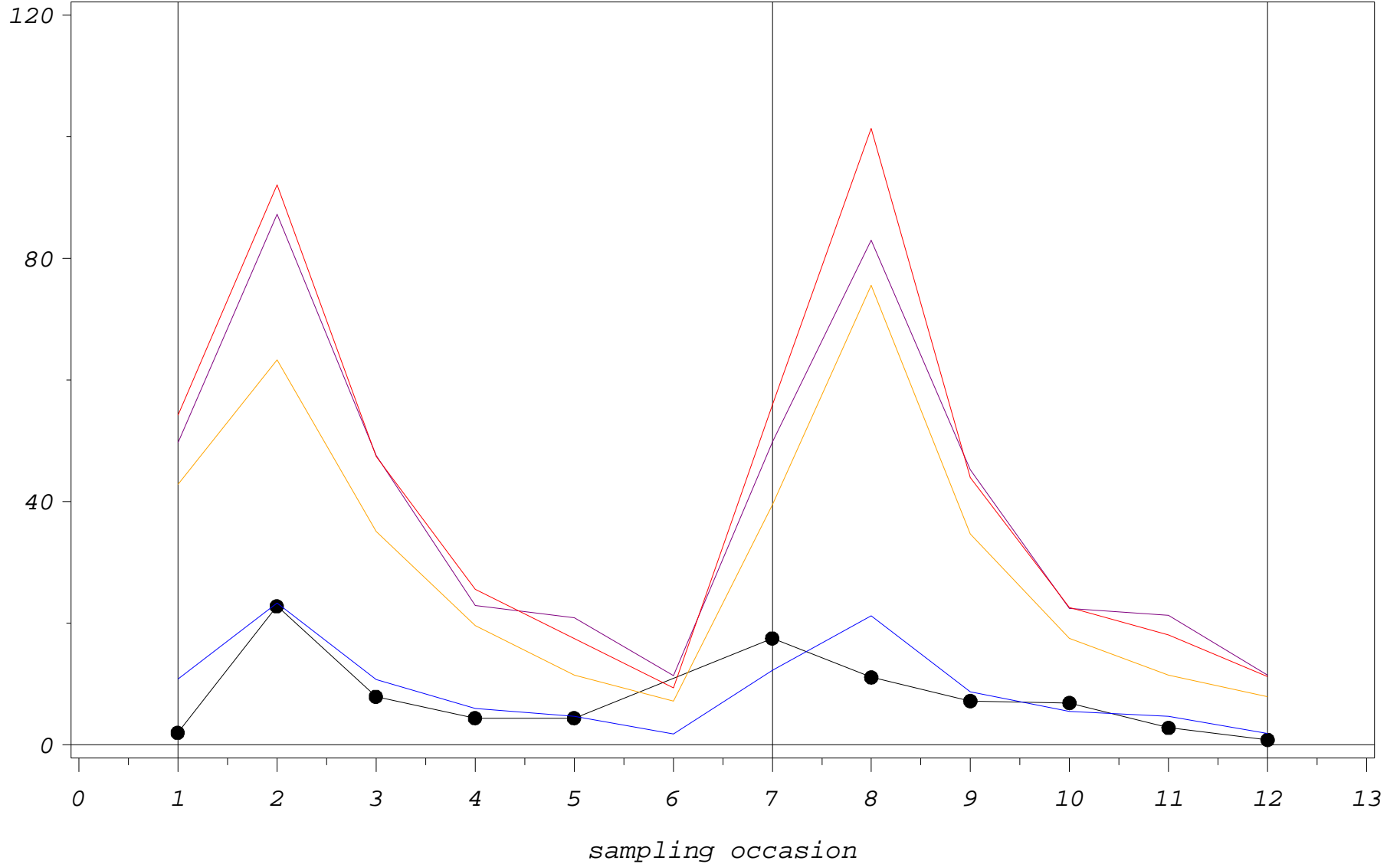
— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
● ● ● cortisol-outlier

Study 1: cortisol single profiles with outlier fences

CODE=P00521

cortisol (nmol/l)

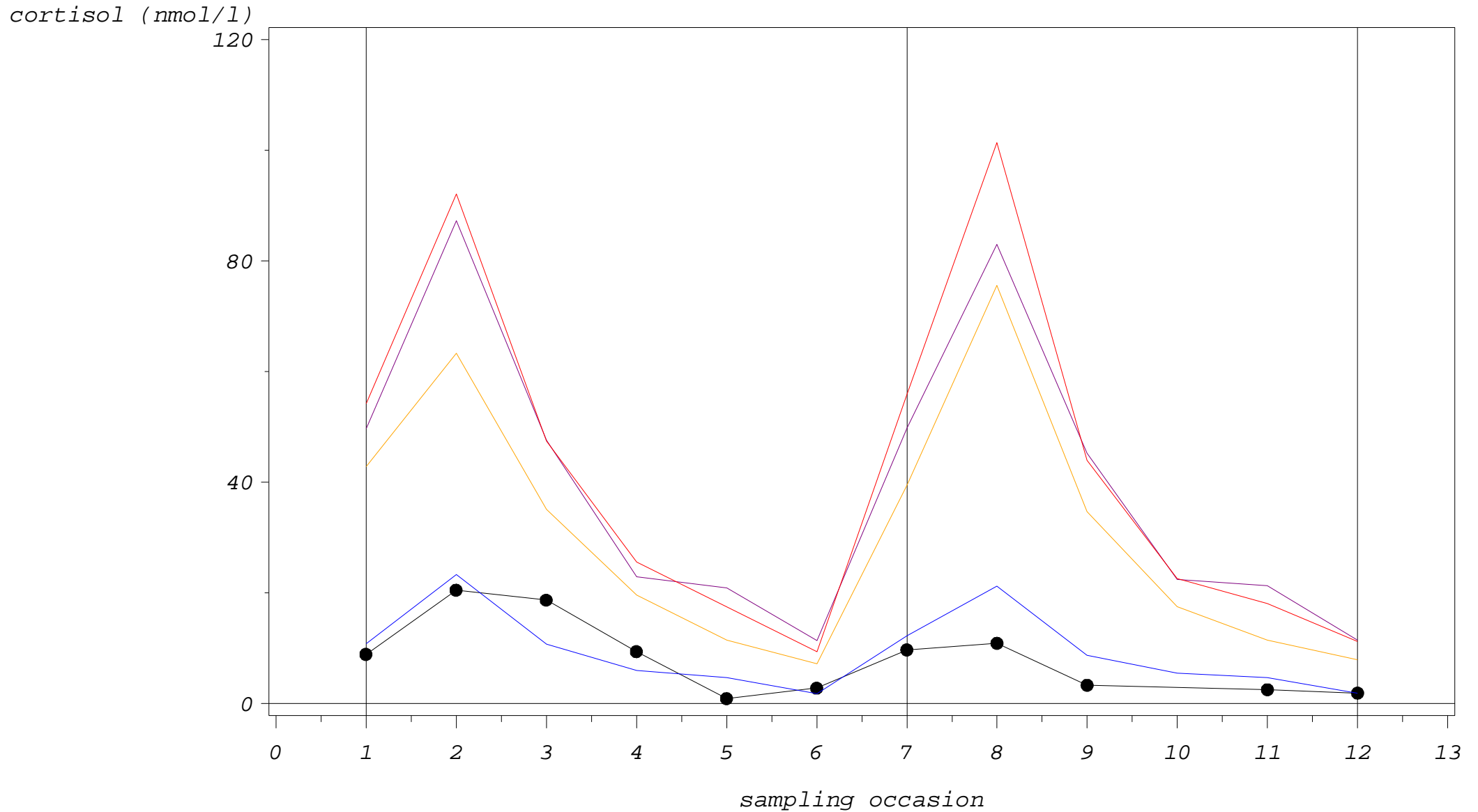


PLOT

●—●—●	Cortisol	—	Median	—	$MW + (4 \times SD)$
—	$Q3 + (3 \times IQR)$	—	$Q2 + (4 \times (Q3 - Q2))$	●●●	cortisol-outlier

Study 1: cortisol single profiles with outlier fences

CODE=P00523



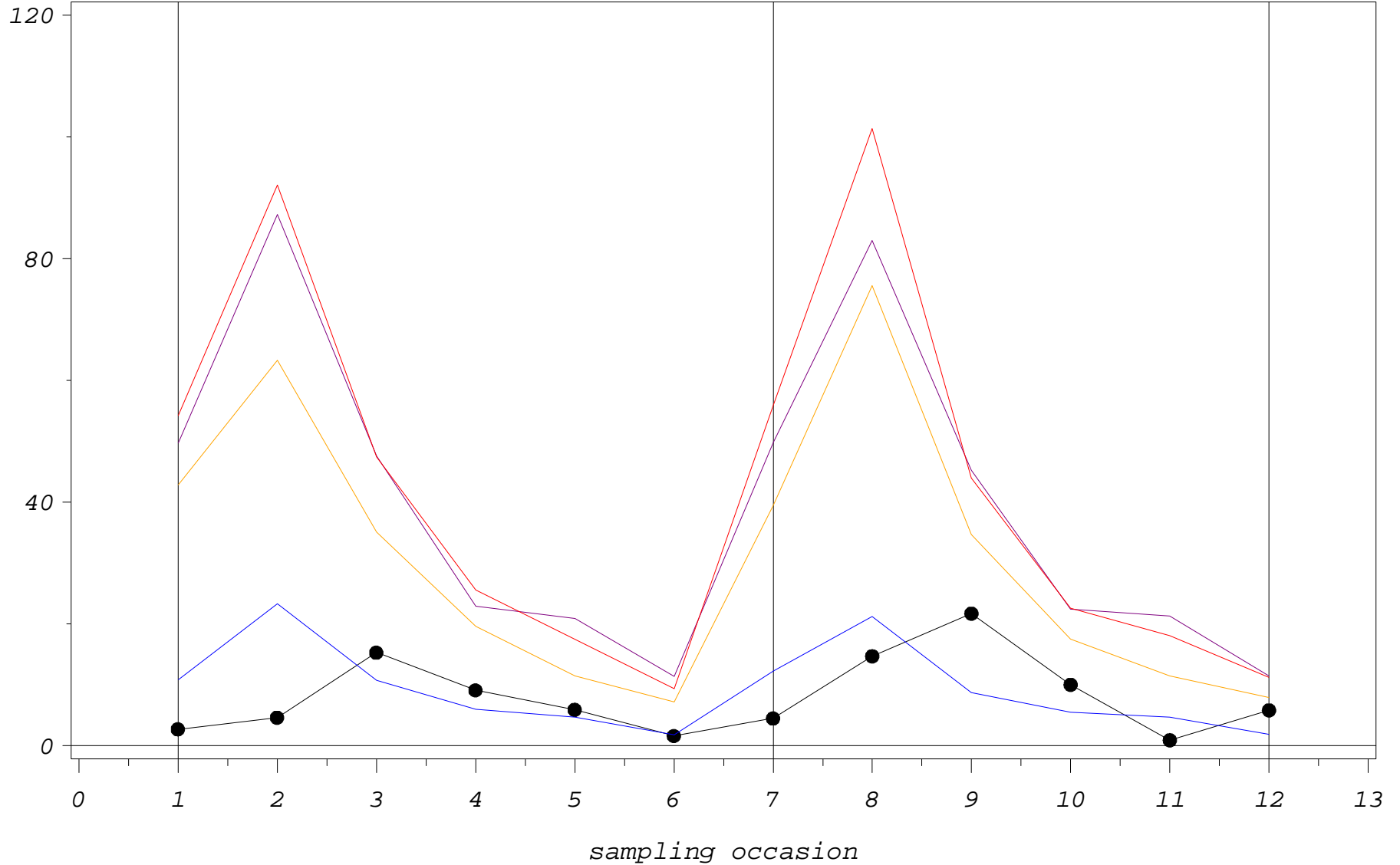
PLOT

●—●—●	Cortisol	—	Median	—	$MW + (4 \cdot SD)$
—	$Q3 + (3 \cdot IQR)$	—	$Q2 + (4 \cdot (Q3 - Q2))$	●●●	cortisol-outlier

Study 1: cortisol single profiles with outlier fences

CODE=P00525

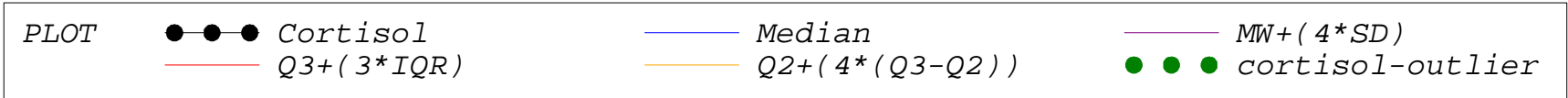
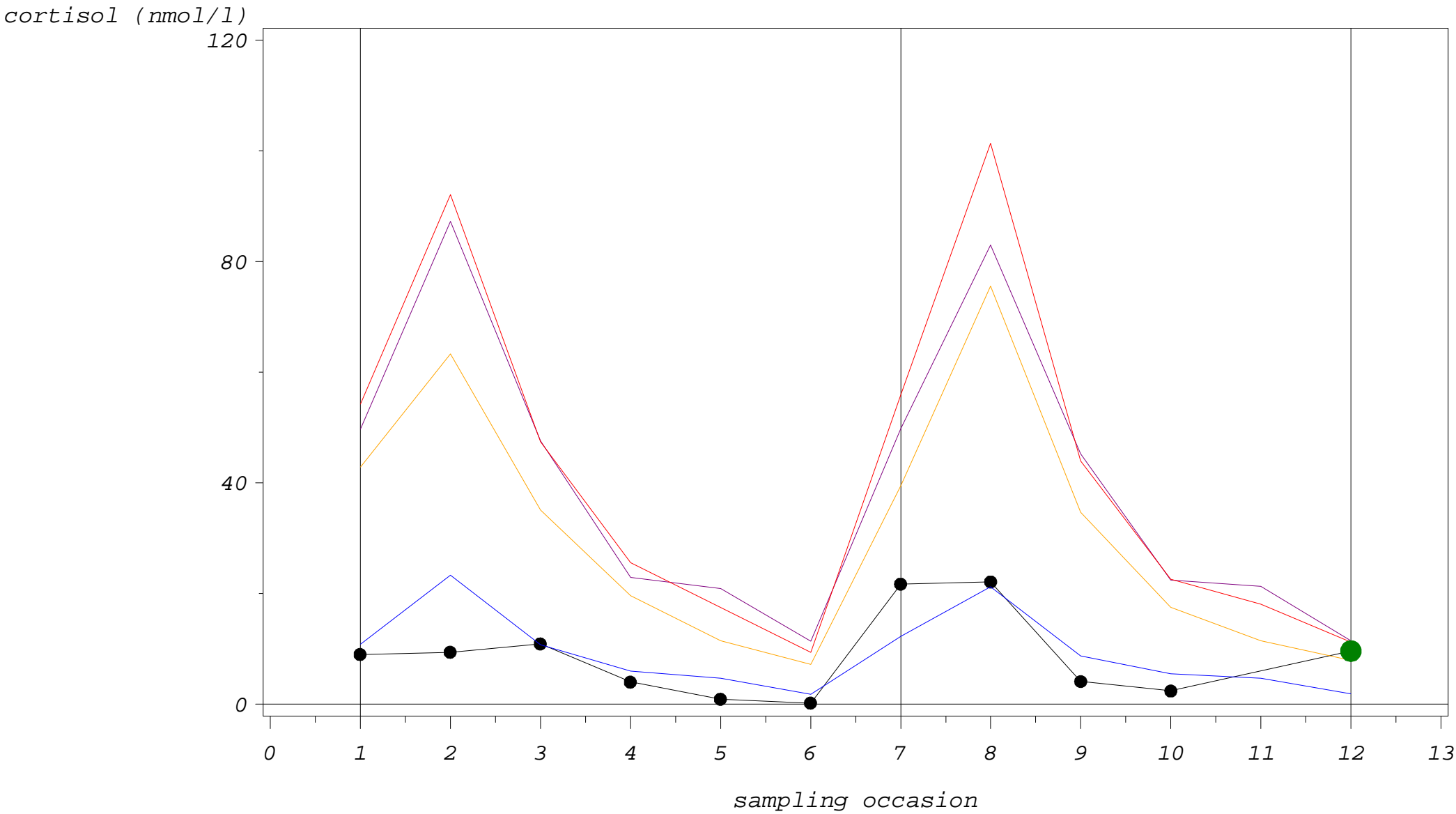
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 \times SD)$
 — $Q3 + (3 \times IQR)$ — $Q2 + (4 \times (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 1: cortisol single profiles with outlier fences

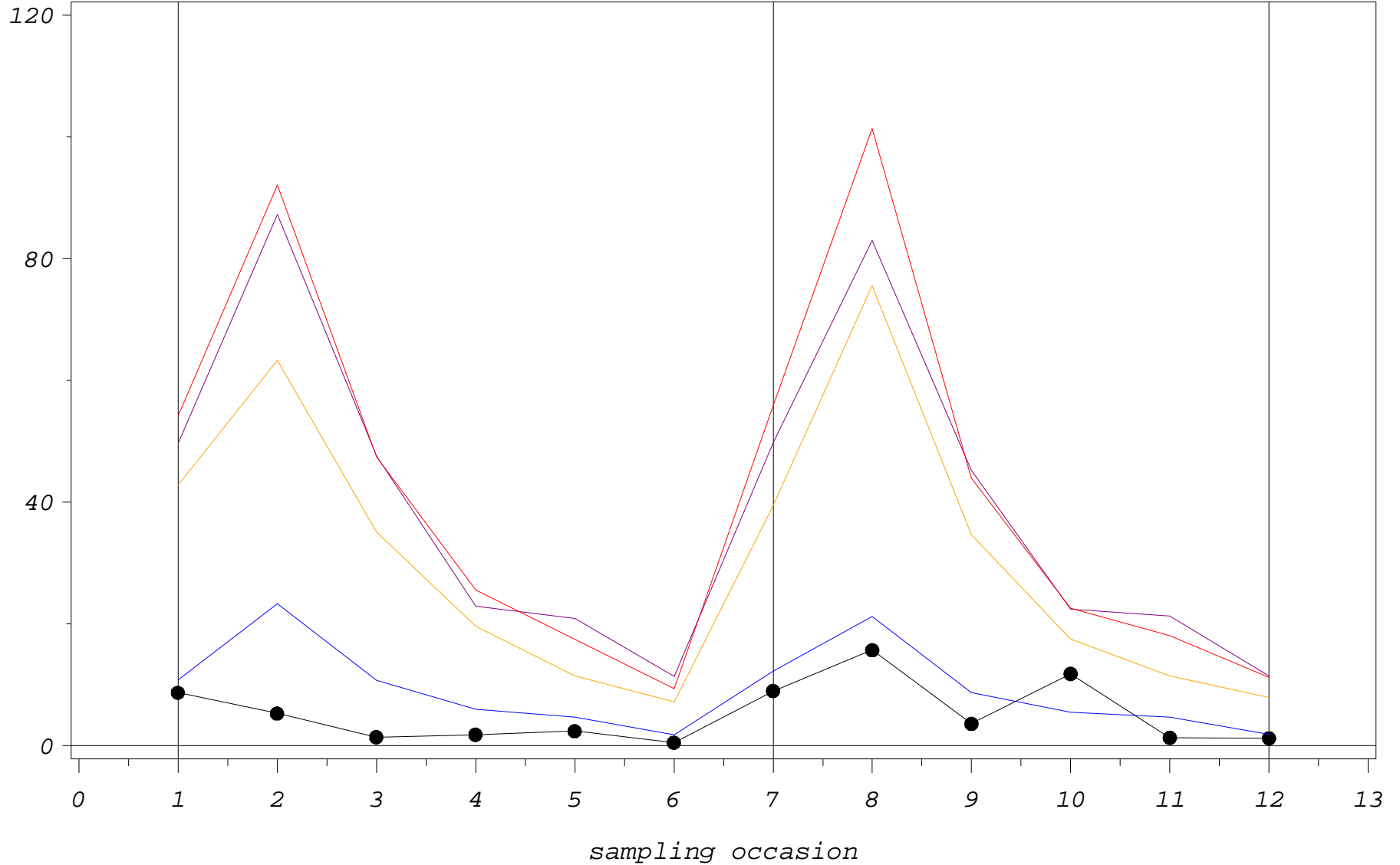
CODE=P01102



Study 1: cortisol single profiles with outlier fences

CODE=P01103

cortisol (nmol/l)

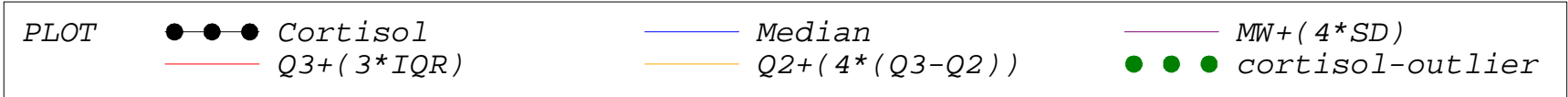
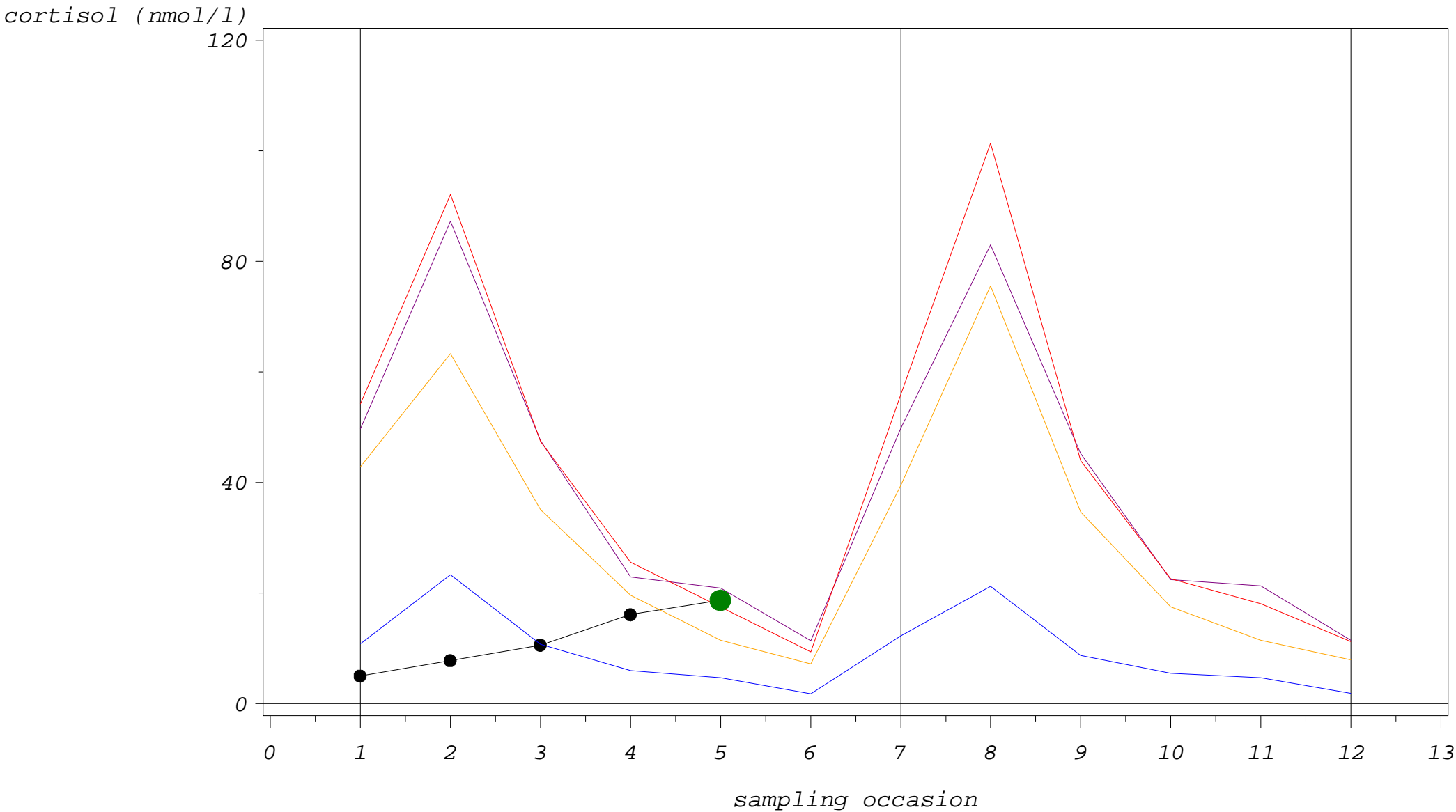


PLOT

●—●—●	Cortisol	—	Median	—	$MW + (4 \cdot SD)$
—	$Q3 + (3 \cdot IQR)$	—	$Q2 + (4 \cdot (Q3 - Q2))$	●●●	cortisol-outlier

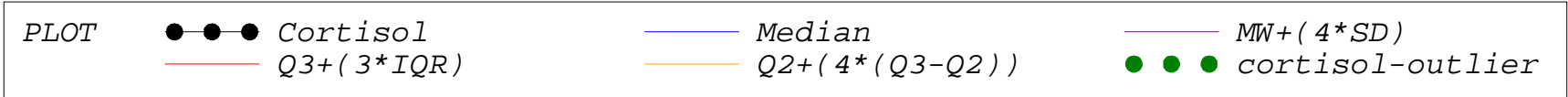
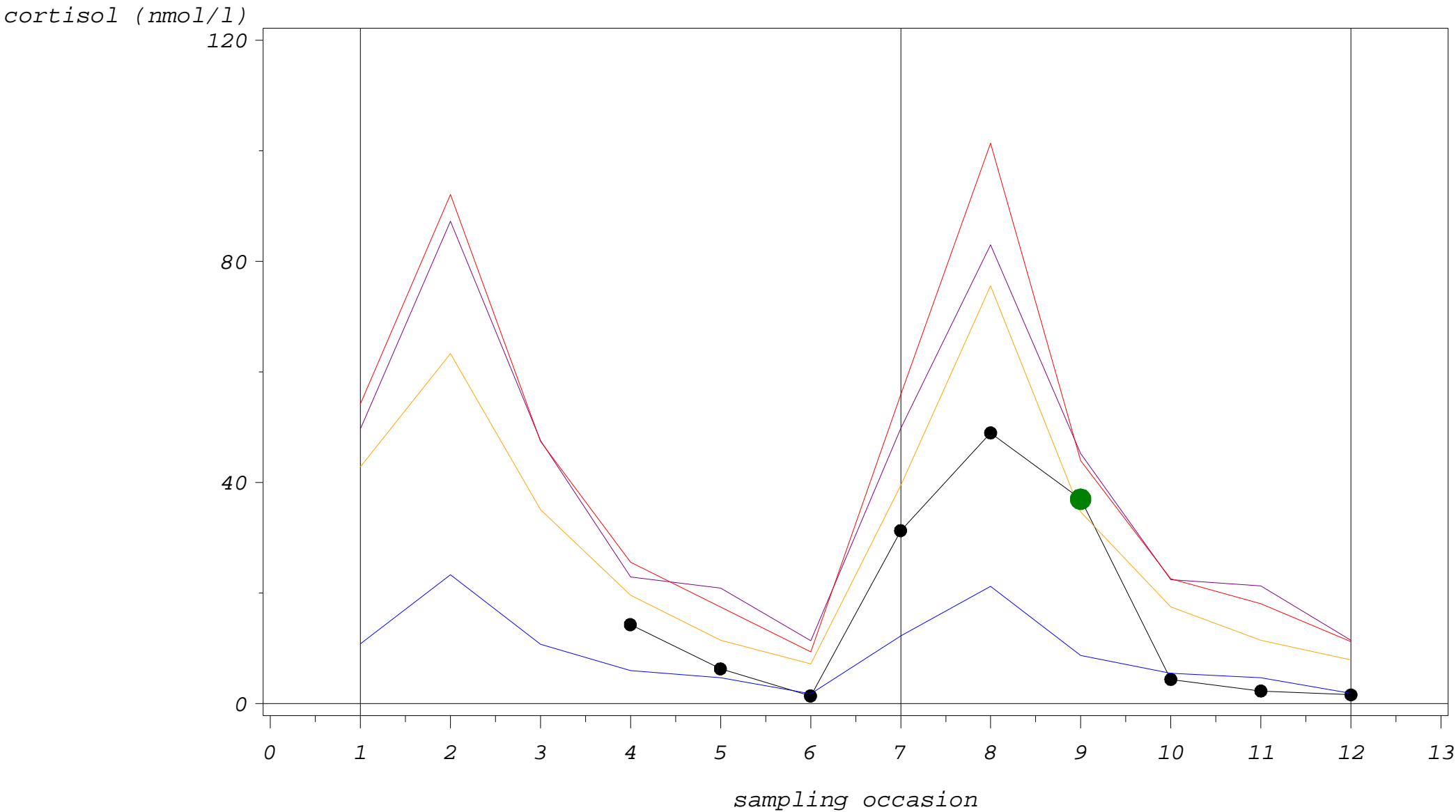
Study 1: cortisol single profiles with outlier fences

CODE=P01104



Study 1: cortisol single profiles with outlier fences

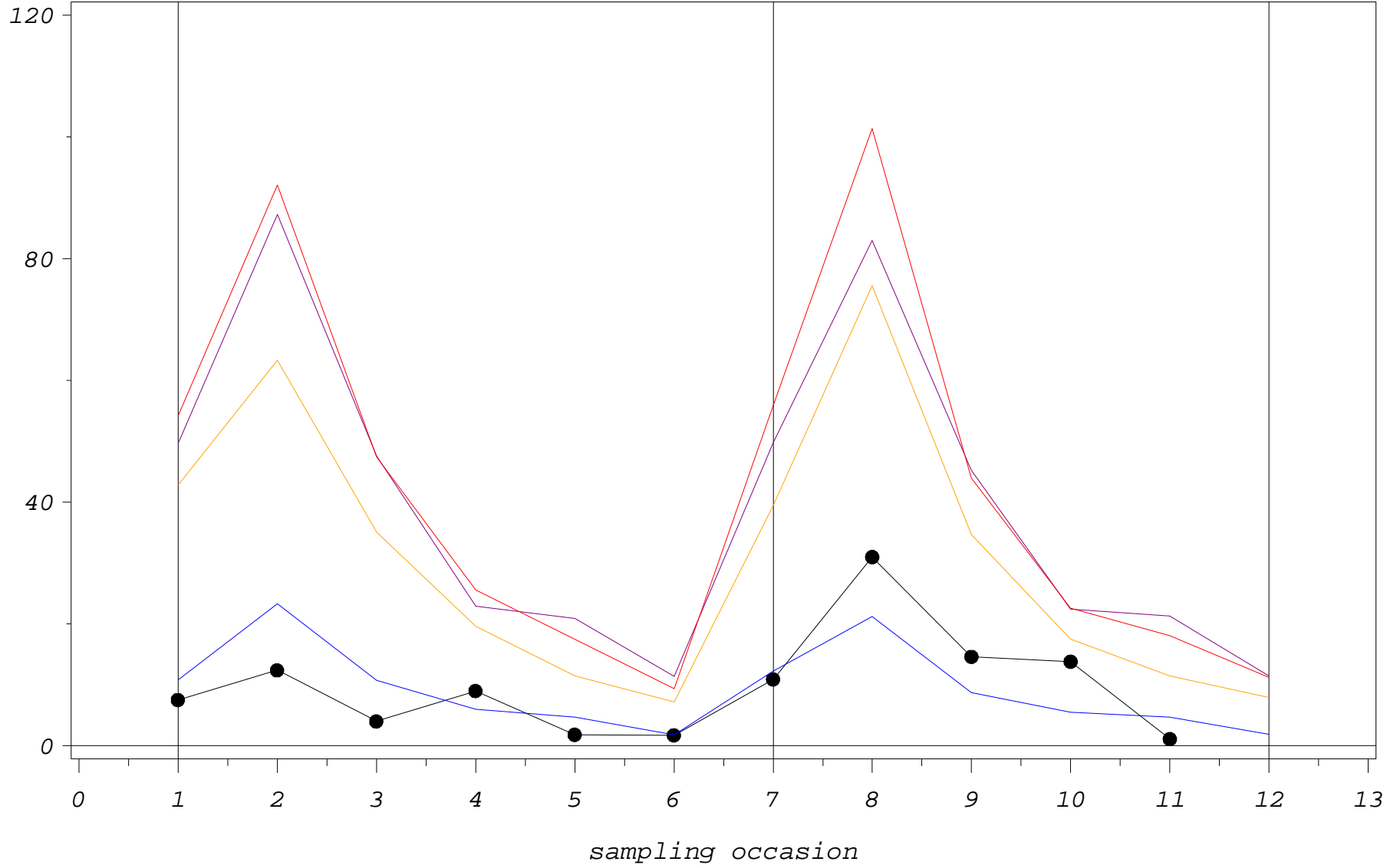
CODE=P01105



Study 1: cortisol single profiles with outlier fences

CODE=P01106

cortisol (nmol/l)



PLOT

●—●—● Cortisol
— Q3+(3*IQR)

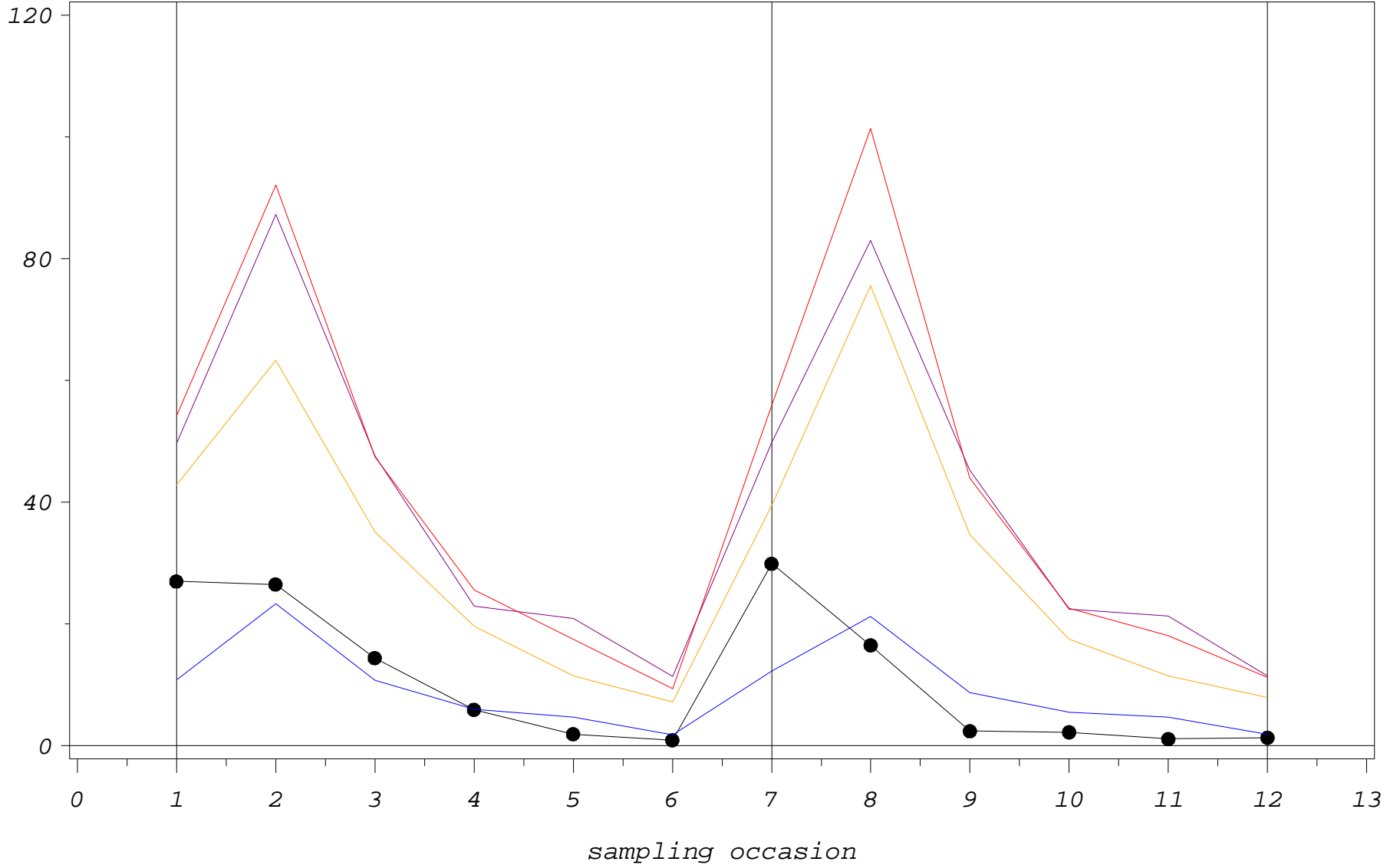
— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
● ● ● cortisol-outlier

Study 1: cortisol single profiles with outlier fences

CODE=P01107

cortisol (nmol/l)

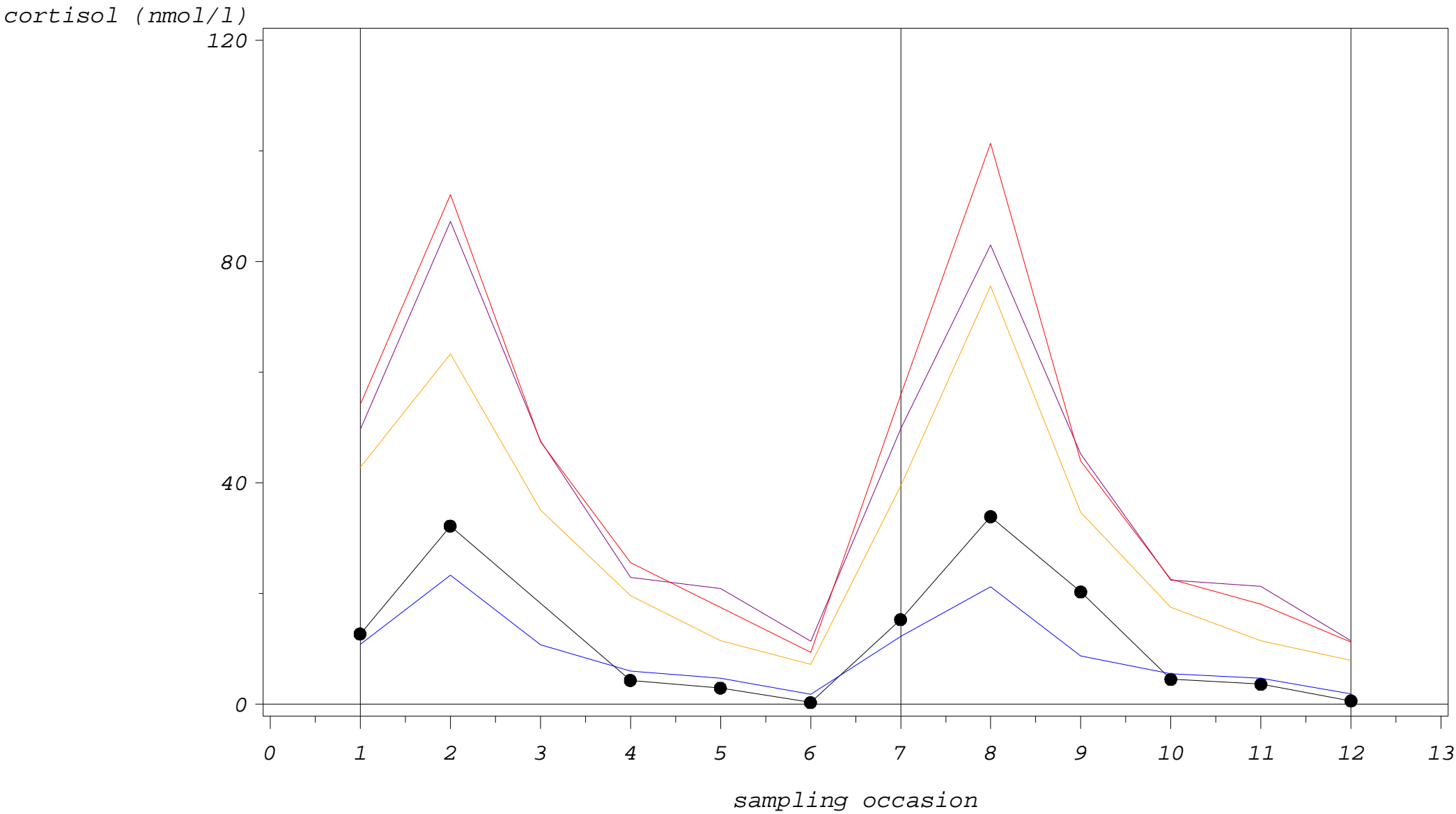


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

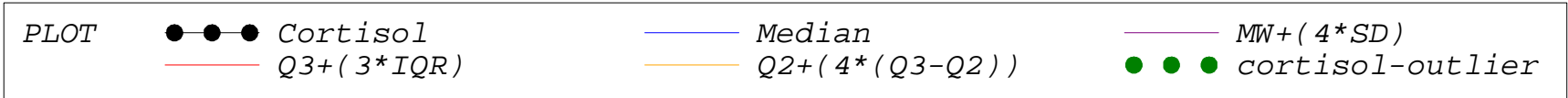
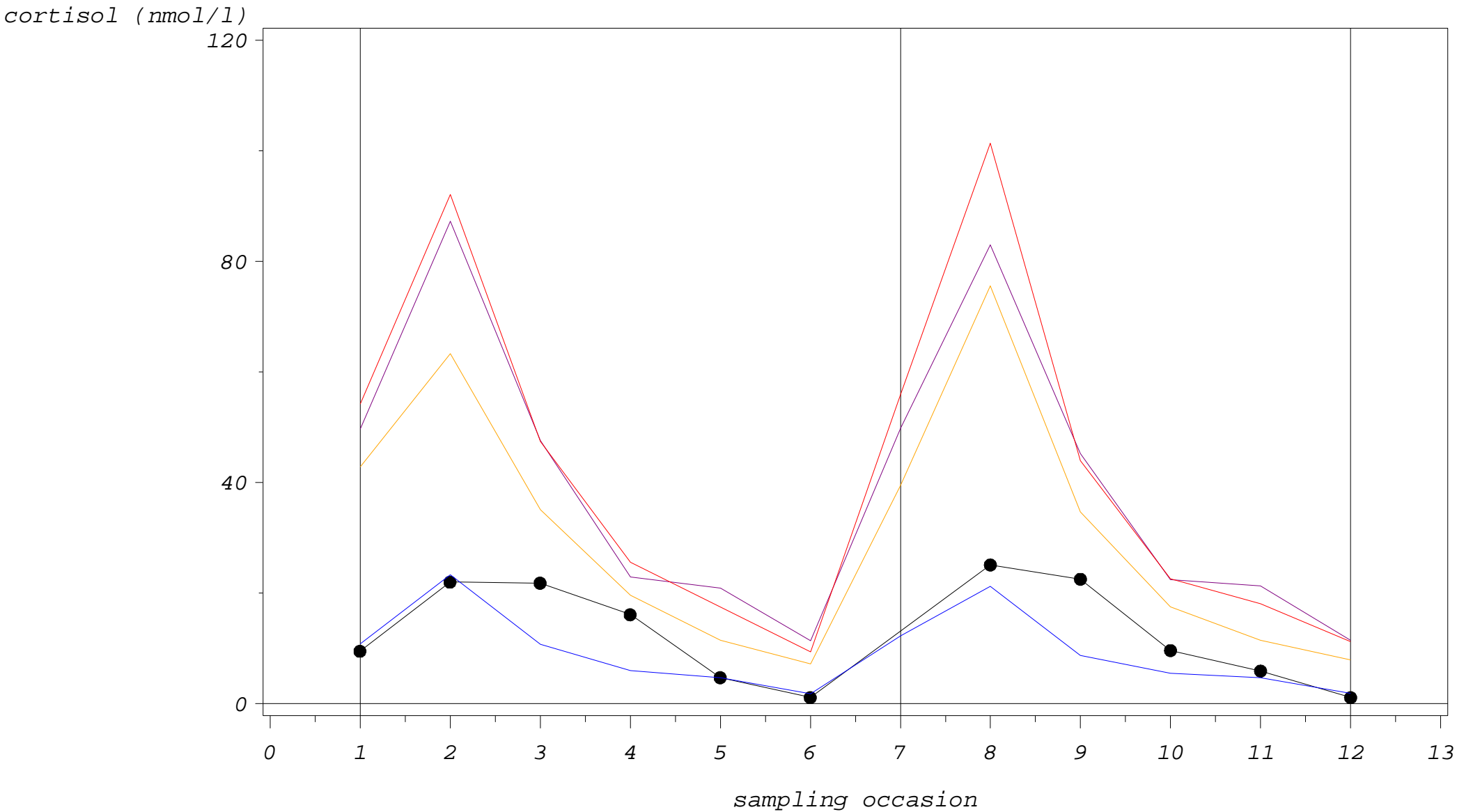
Study 1: cortisol single profiles with outlier fences

CODE=P01108



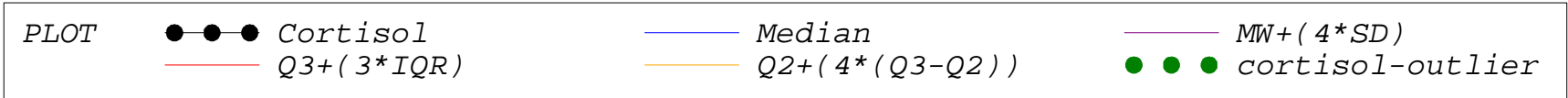
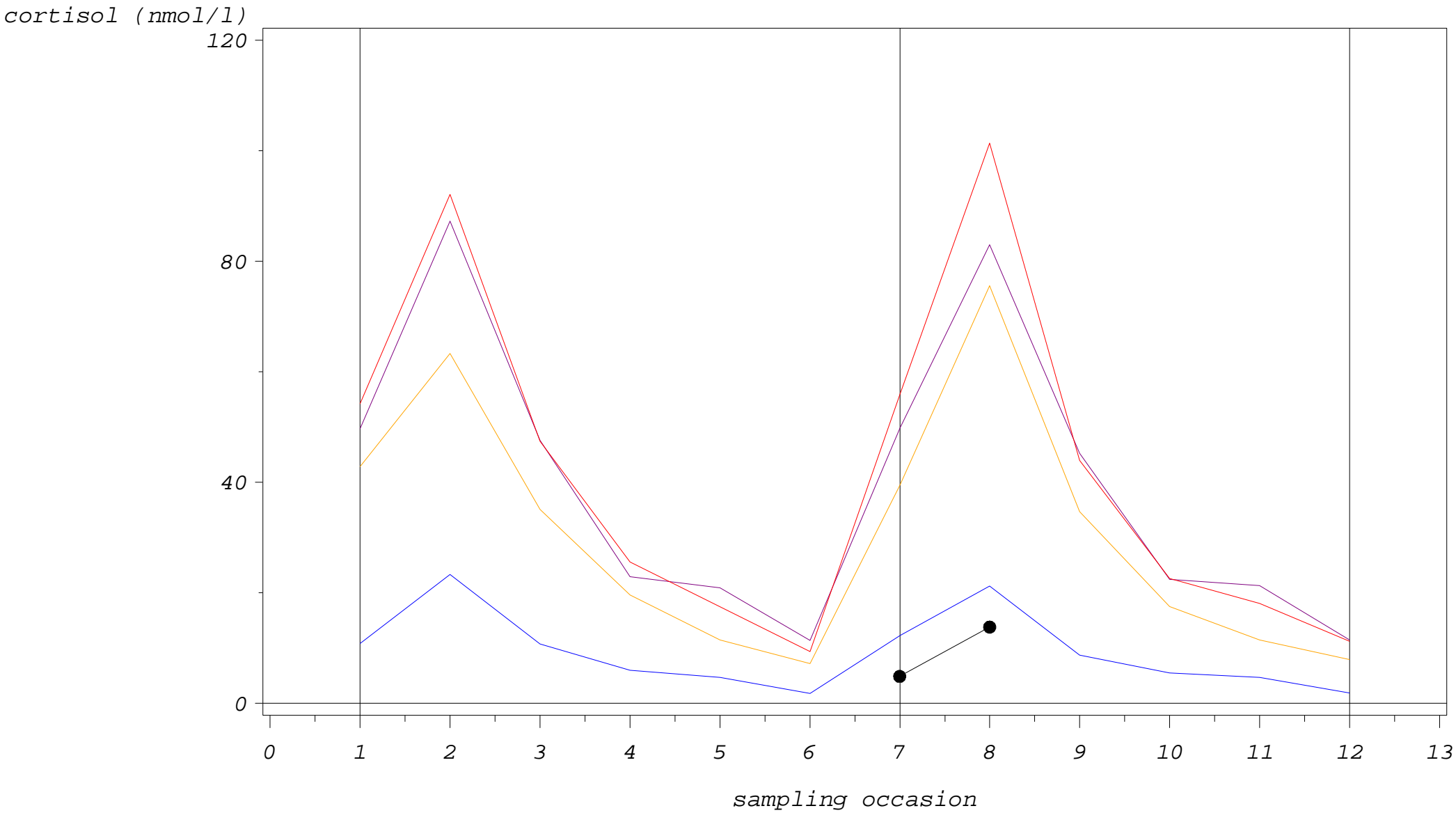
Study 1: cortisol single profiles with outlier fences

CODE=P01114



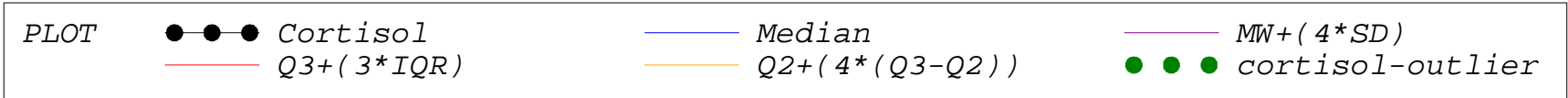
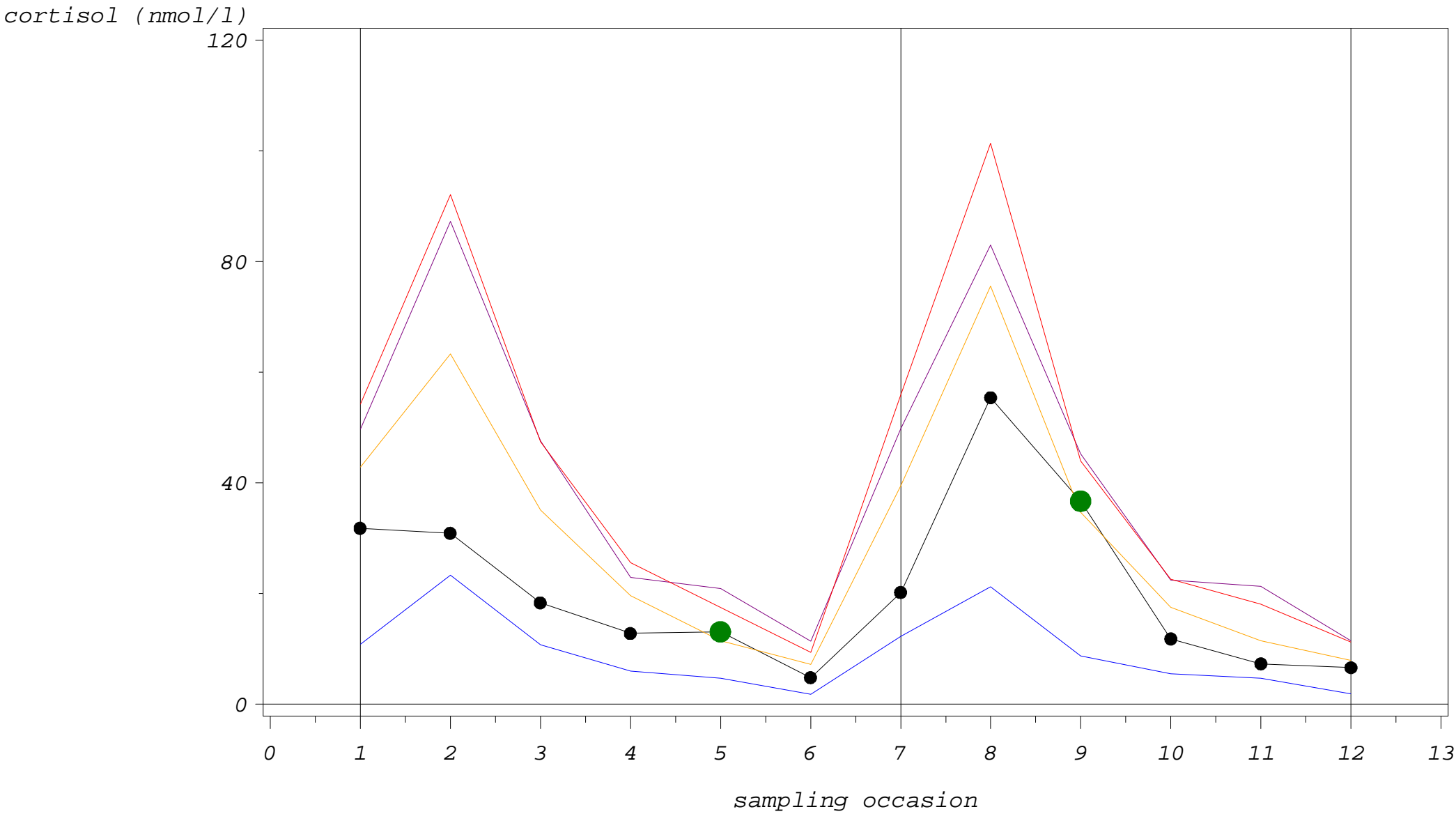
Study 1: cortisol single profiles with outlier fences

CODE=P01201



Study 1: cortisol single profiles with outlier fences

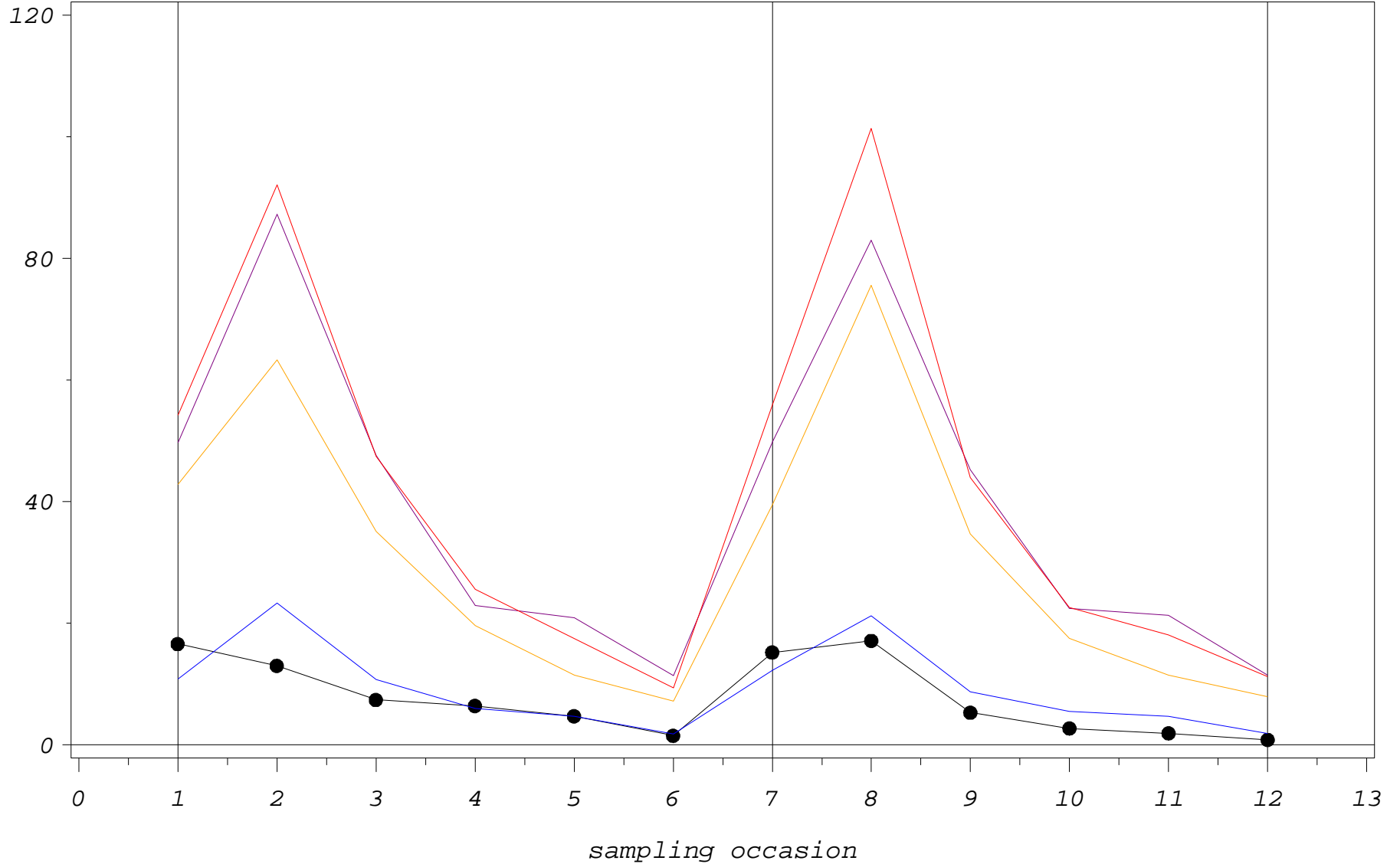
CODE=P02101



Study 1: cortisol single profiles with outlier fences

CODE=P02102

cortisol (nmol/l)

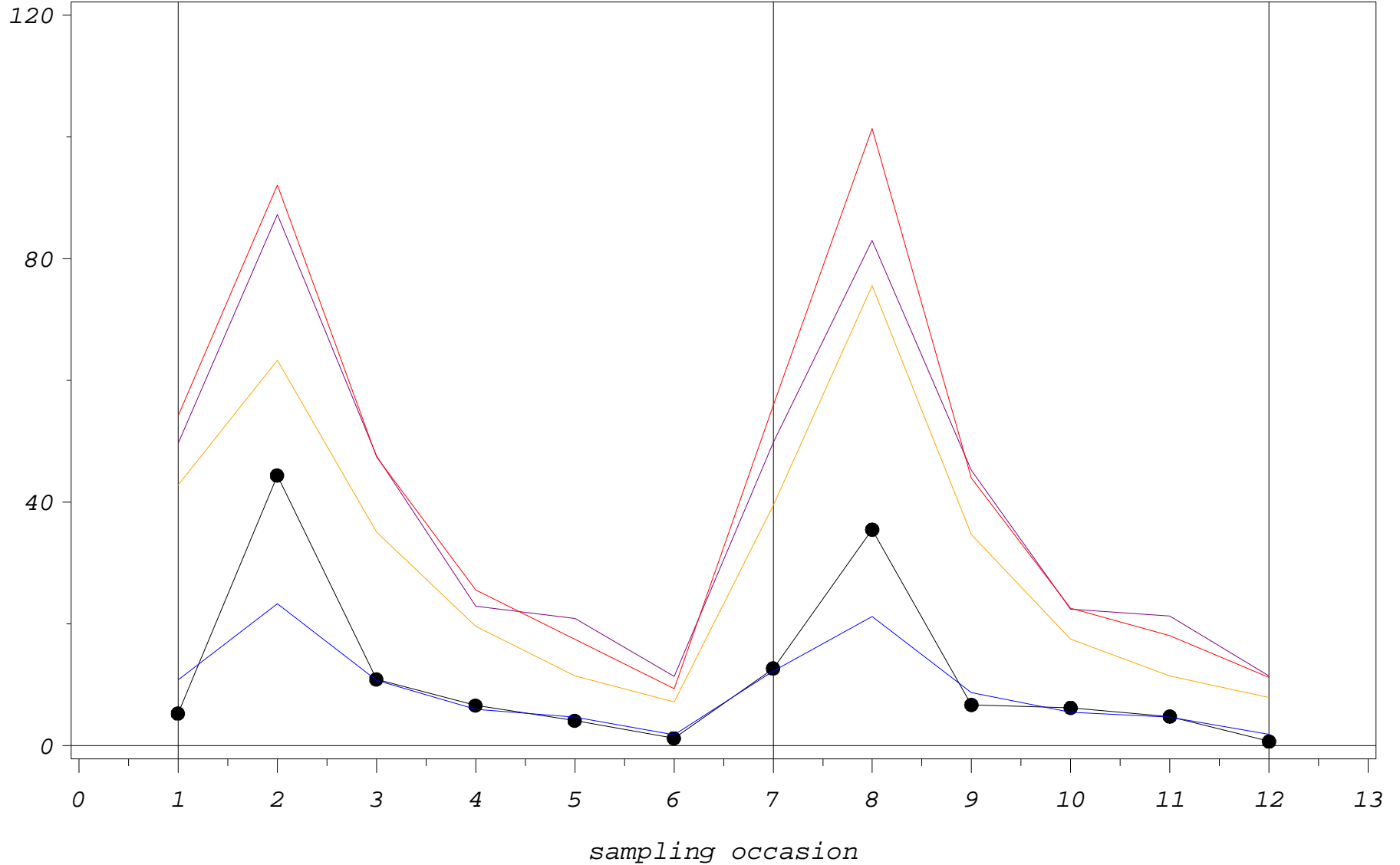


PLOT ●—●—● Cortisol — Median — $MW + (4 \cdot SD)$
 — $Q3 + (3 \cdot IQR)$ — $Q2 + (4 \cdot (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 1: cortisol single profiles with outlier fences

CODE=P02103

cortisol (nmol/l)



PLOT

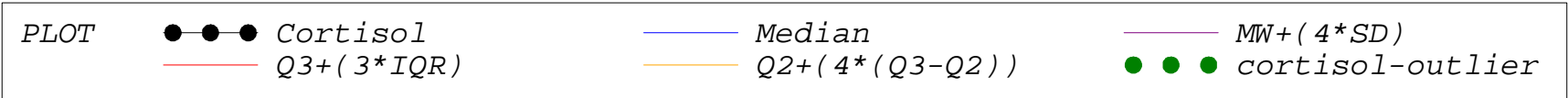
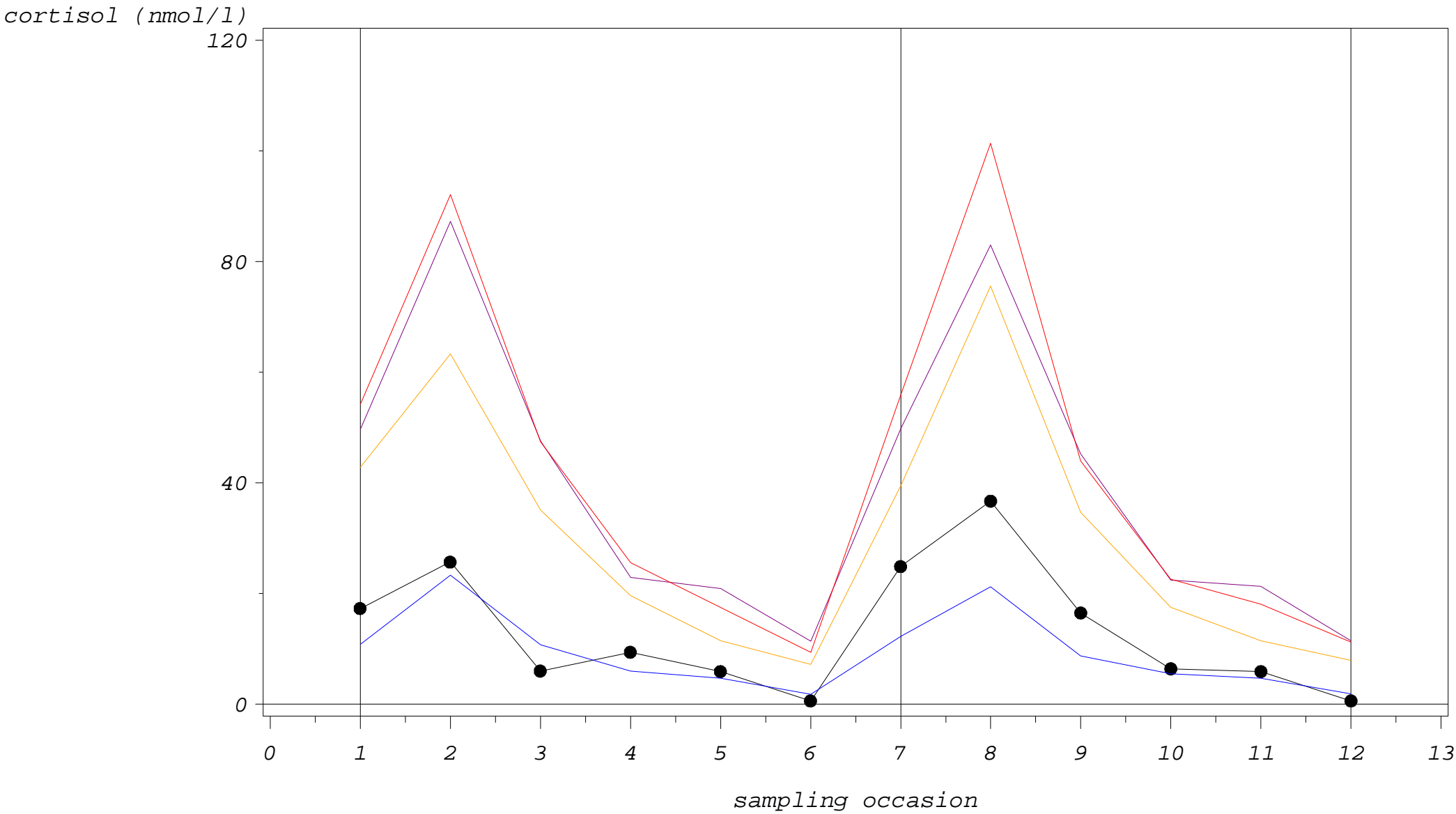
●—●—● Cortisol
— Q3+(3*IQR)

— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
● ● ● cortisol-outlier

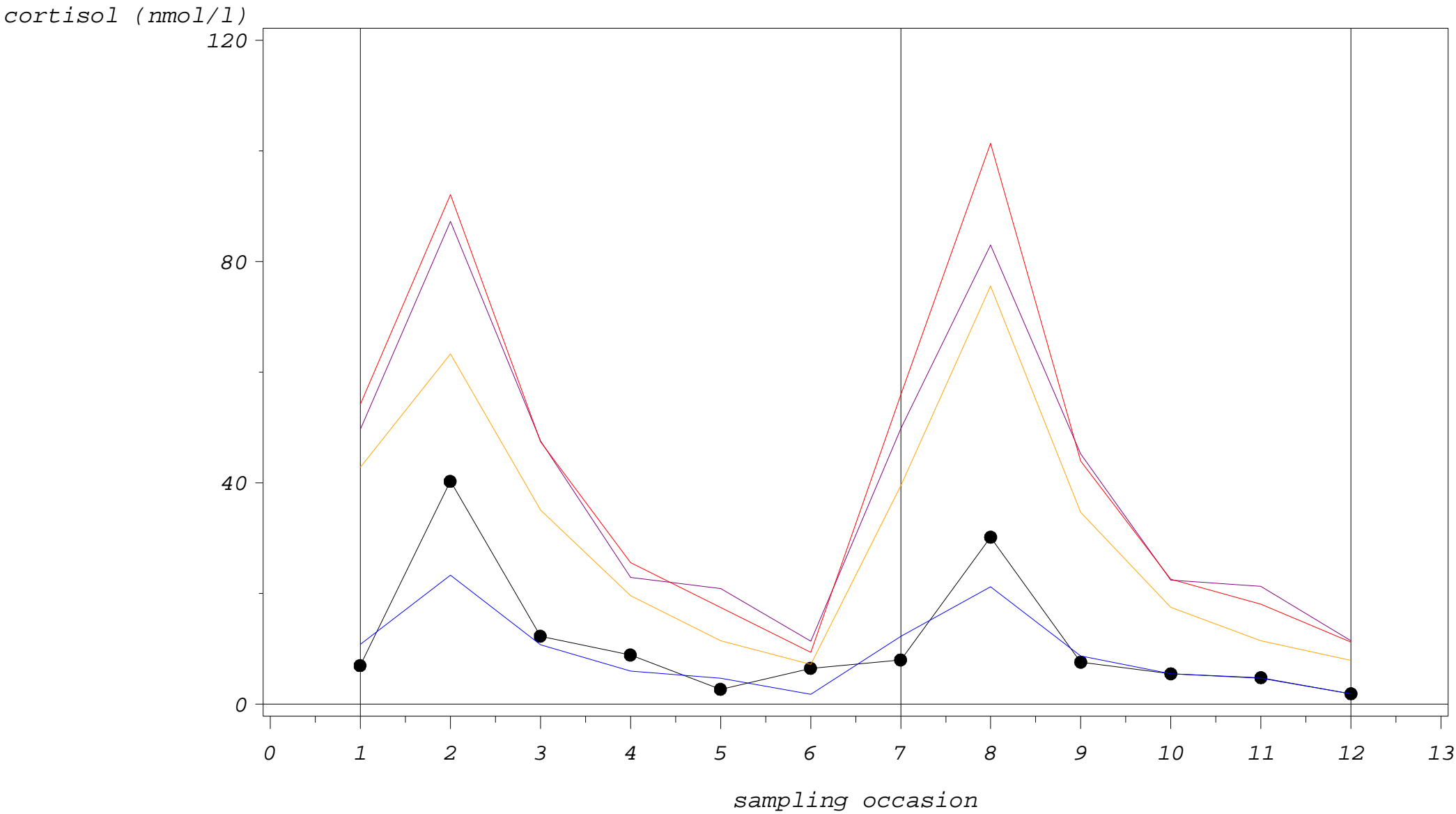
Study 1: cortisol single profiles with outlier fences

CODE=P02105



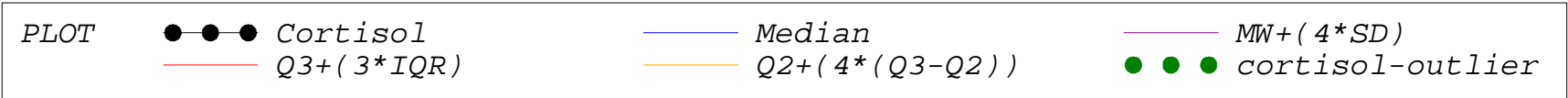
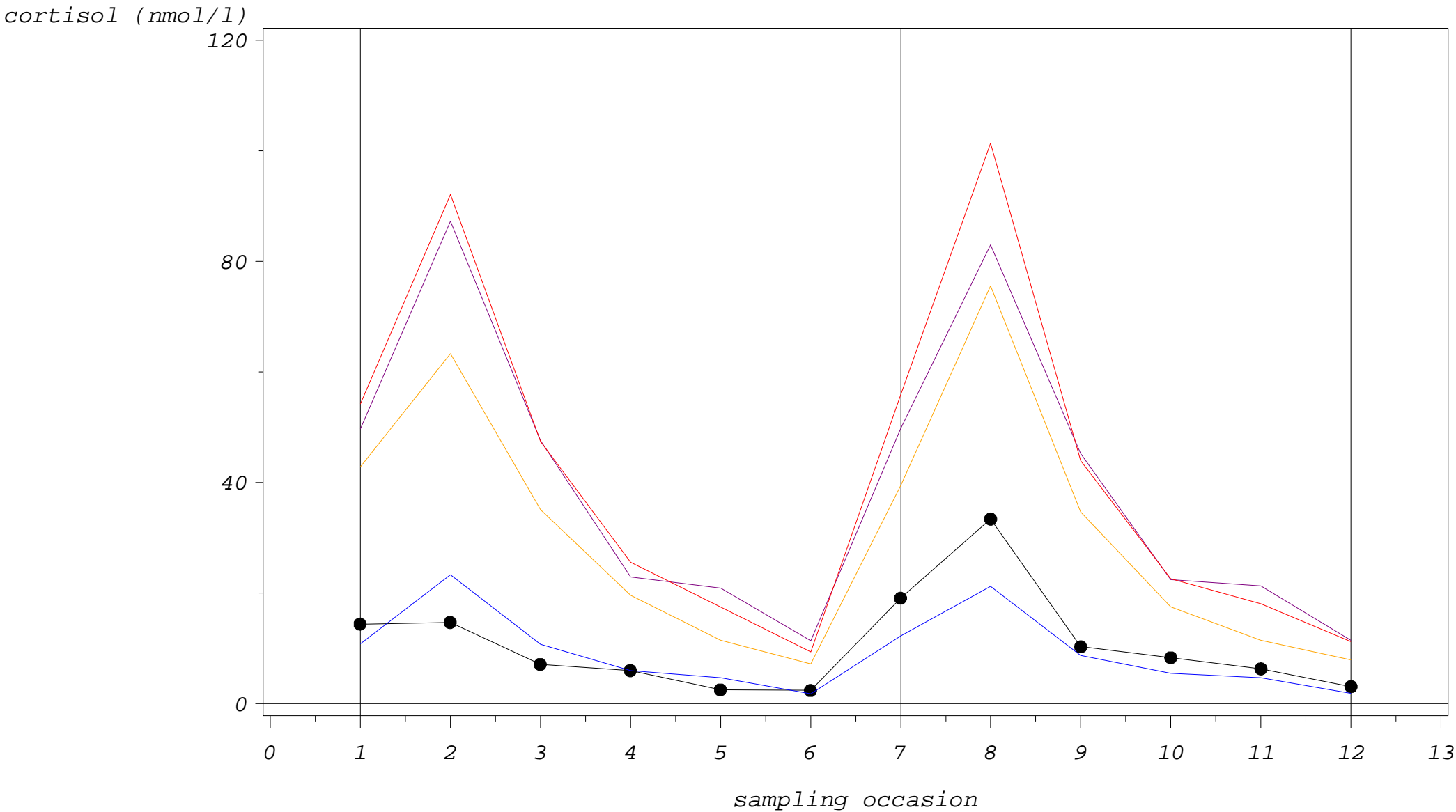
Study 1: cortisol single profiles with outlier fences

CODE=P02106



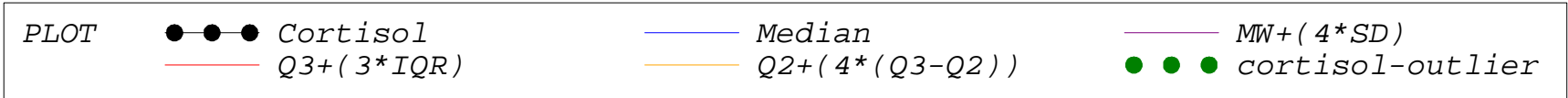
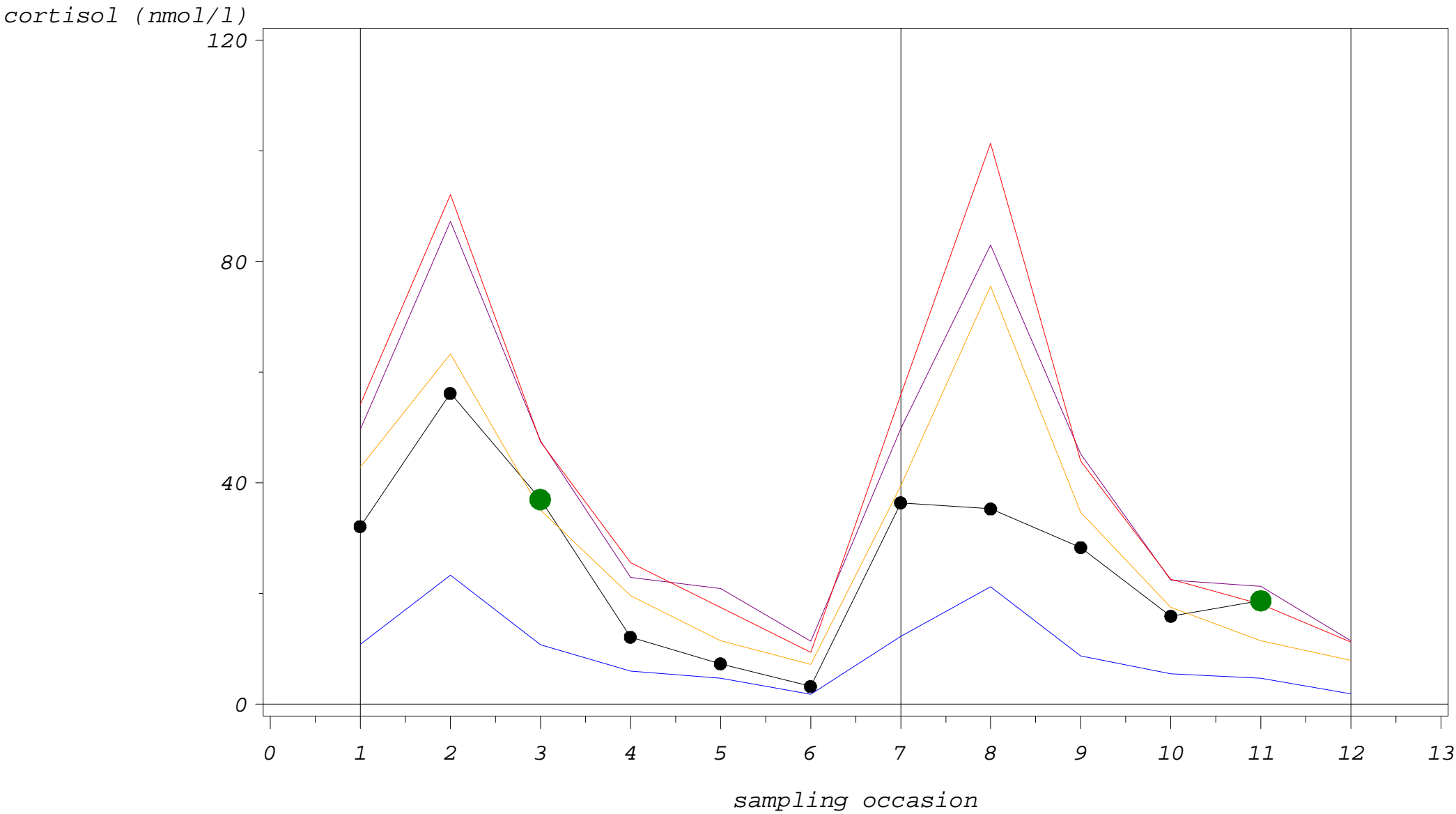
Study 1: cortisol single profiles with outlier fences

CODE=P02201



Study 1: cortisol single profiles with outlier fences

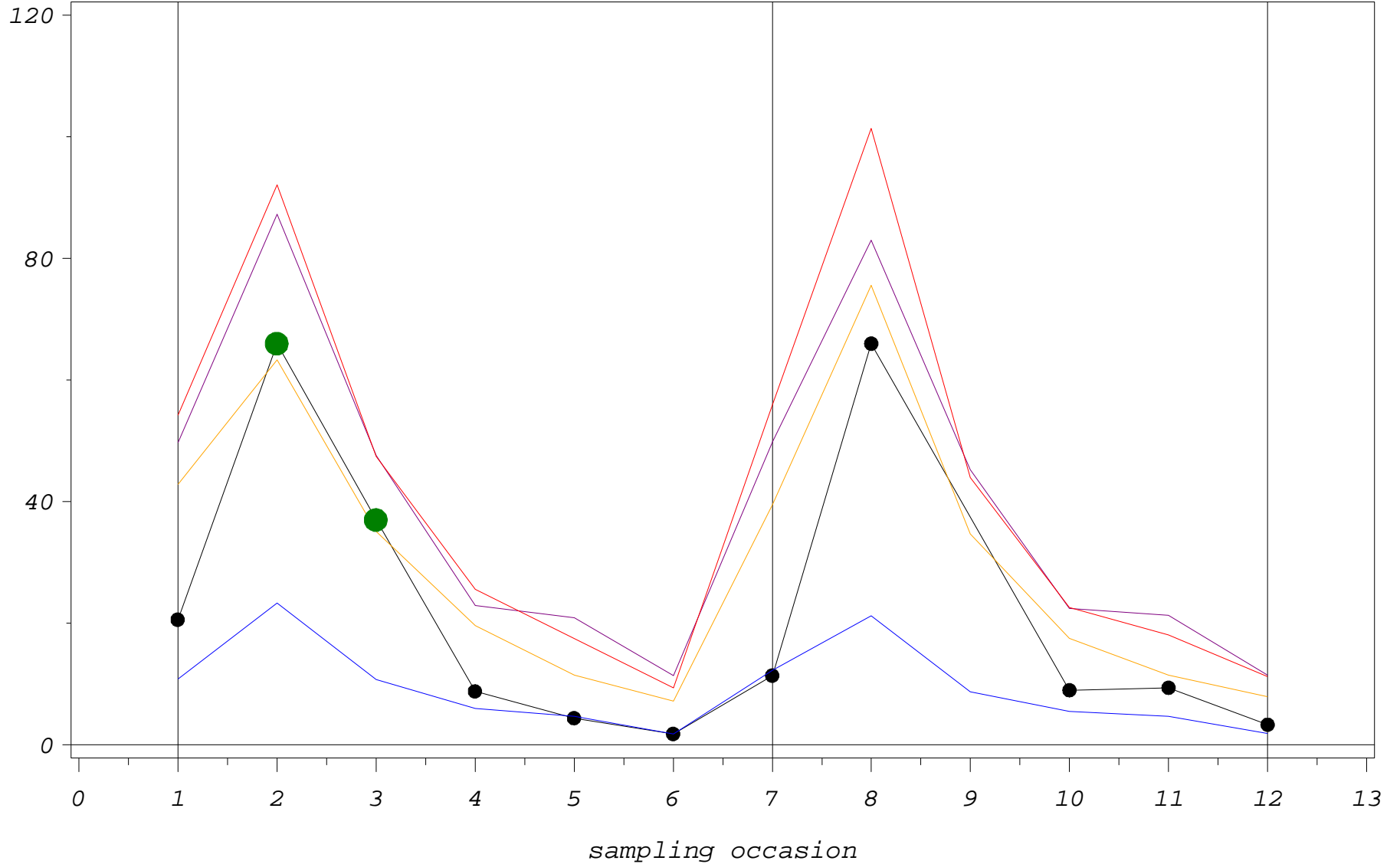
CODE=P02202



Study 1: cortisol single profiles with outlier fences

CODE=P02203

cortisol (nmol/l)

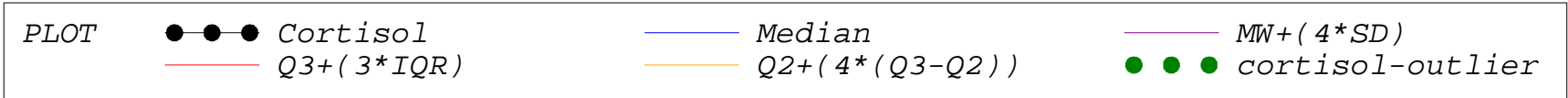
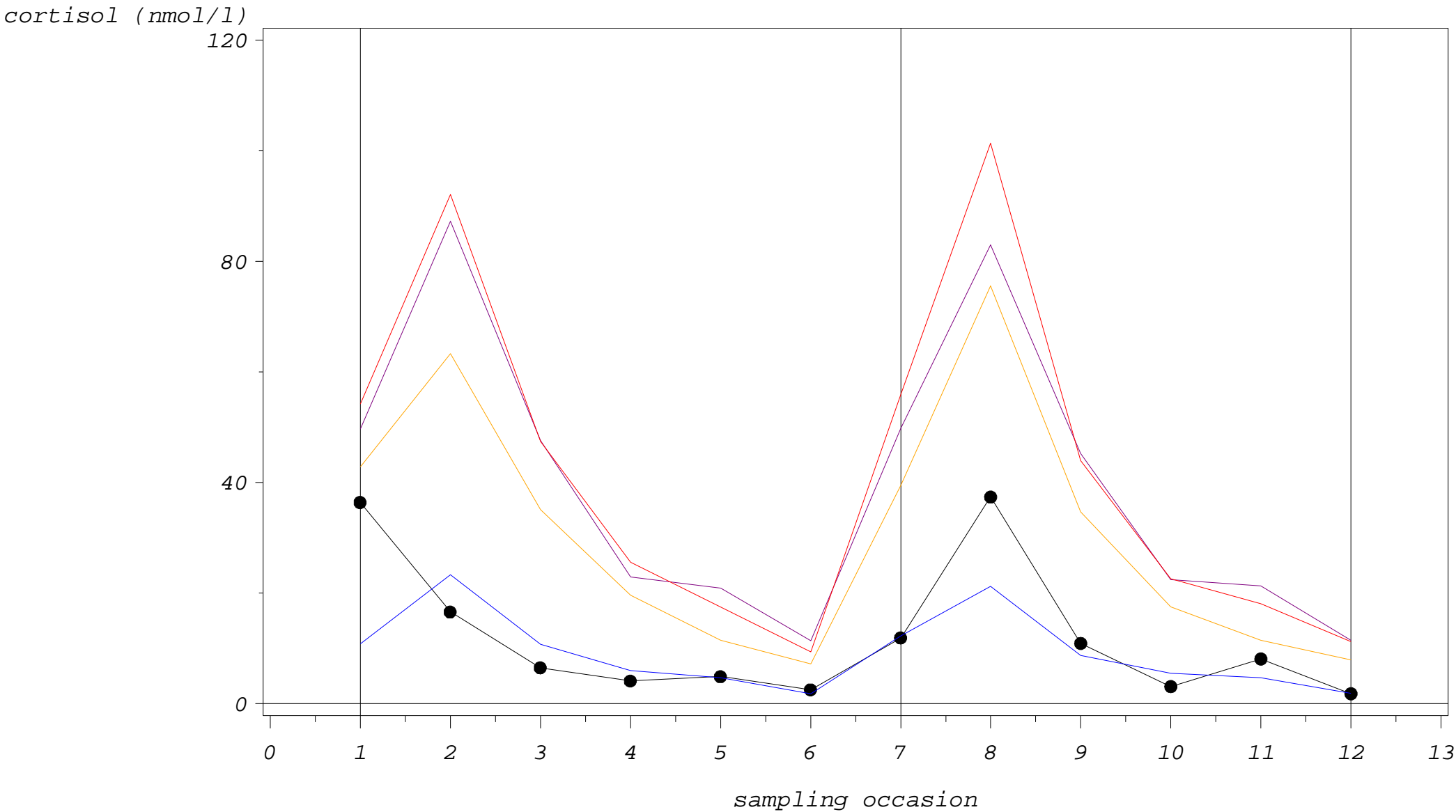


PLOT

●—●—●	Cortisol	—	Median	—	$MW + (4 * SD)$
—	$Q3 + (3 * IQR)$	—	$Q2 + (4 * (Q3 - Q2))$	● ● ●	cortisol-outlier

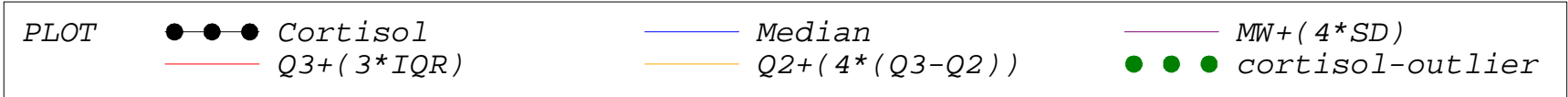
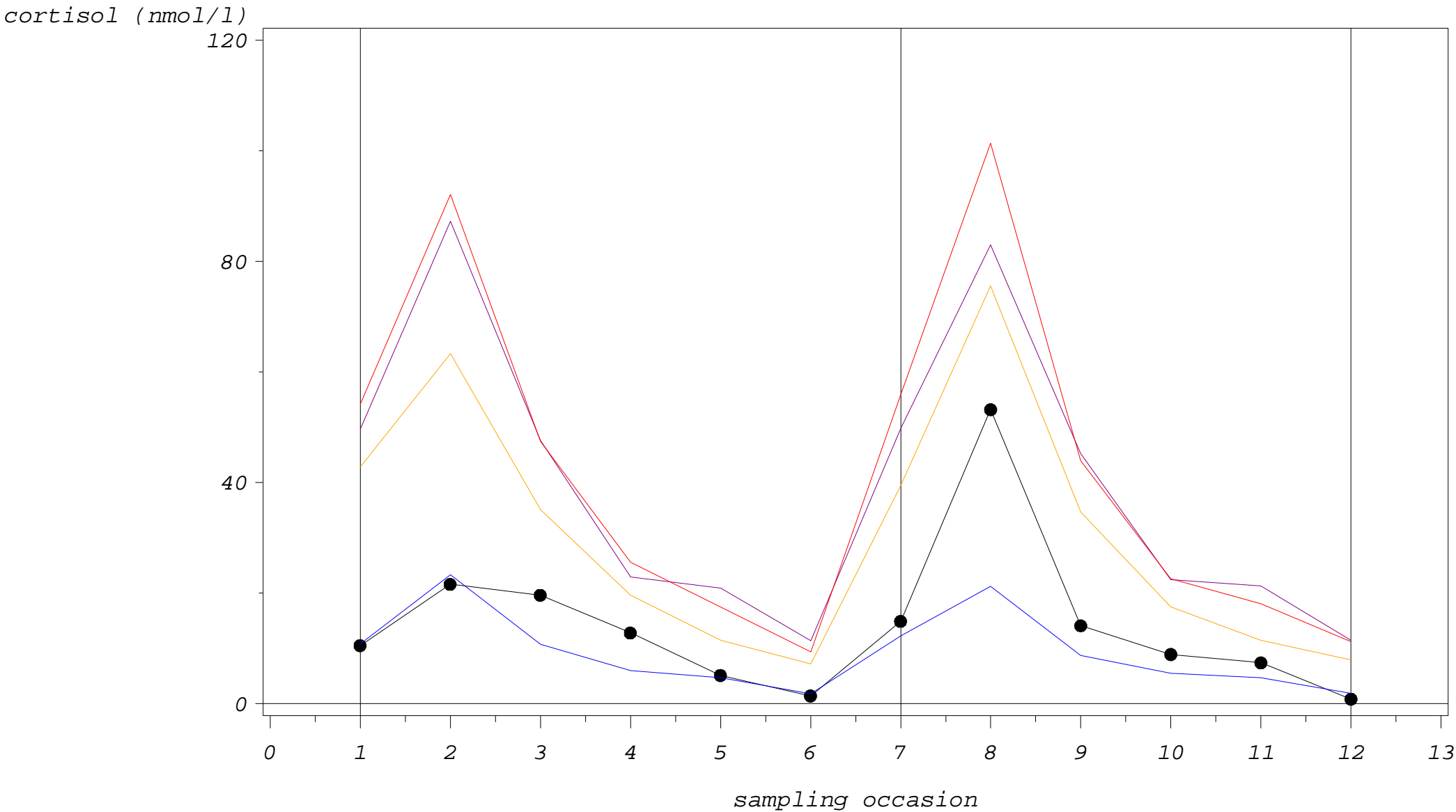
Study 1: cortisol single profiles with outlier fences

CODE=P02204



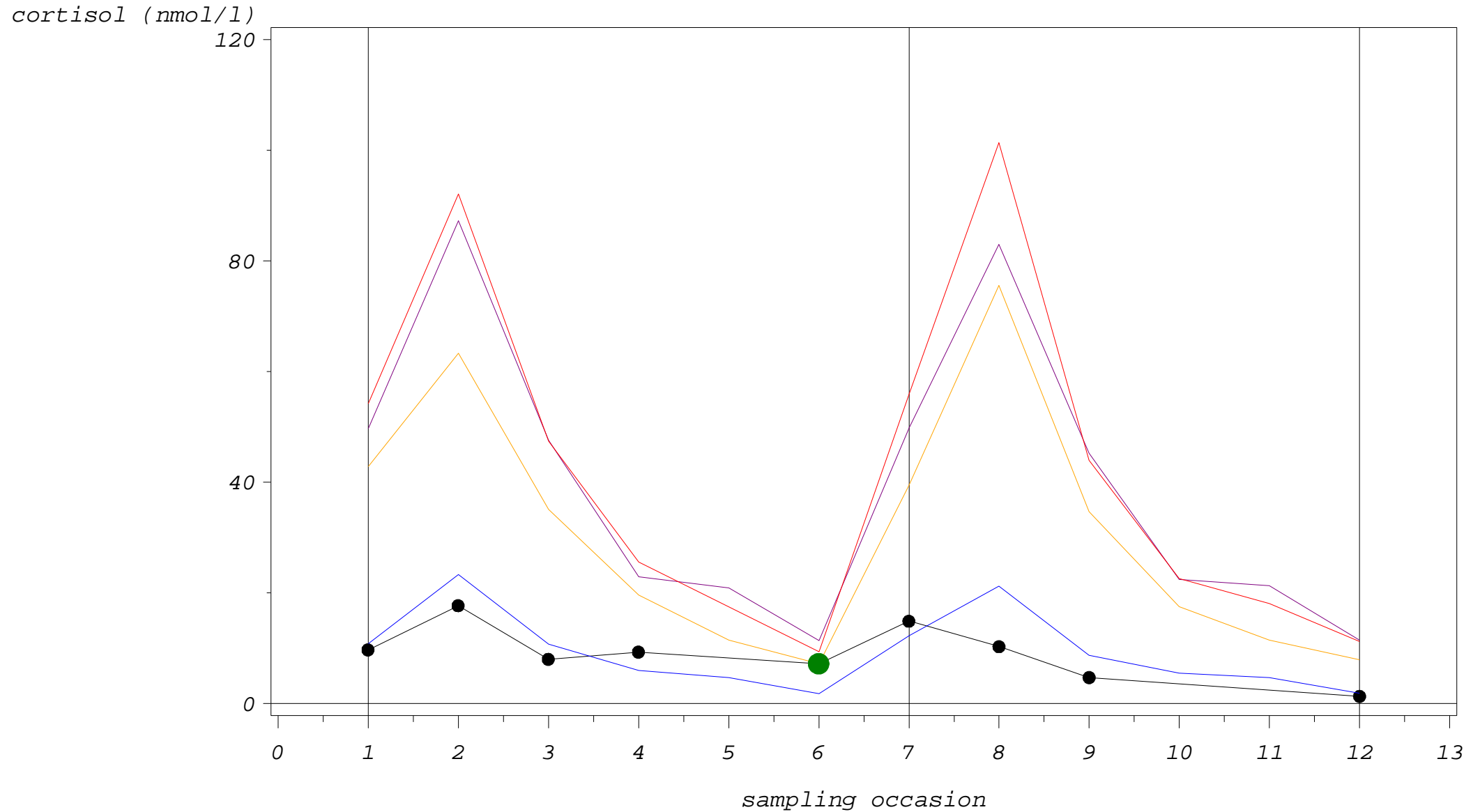
Study 1: cortisol single profiles with outlier fences

CODE=P02205



Study 1: cortisol single profiles with outlier fences

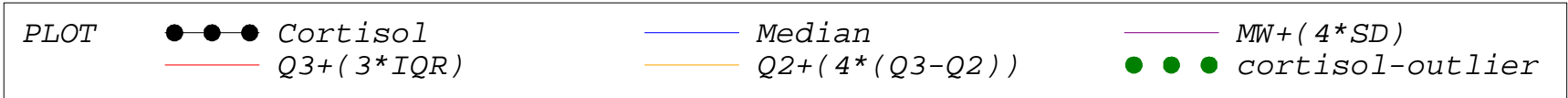
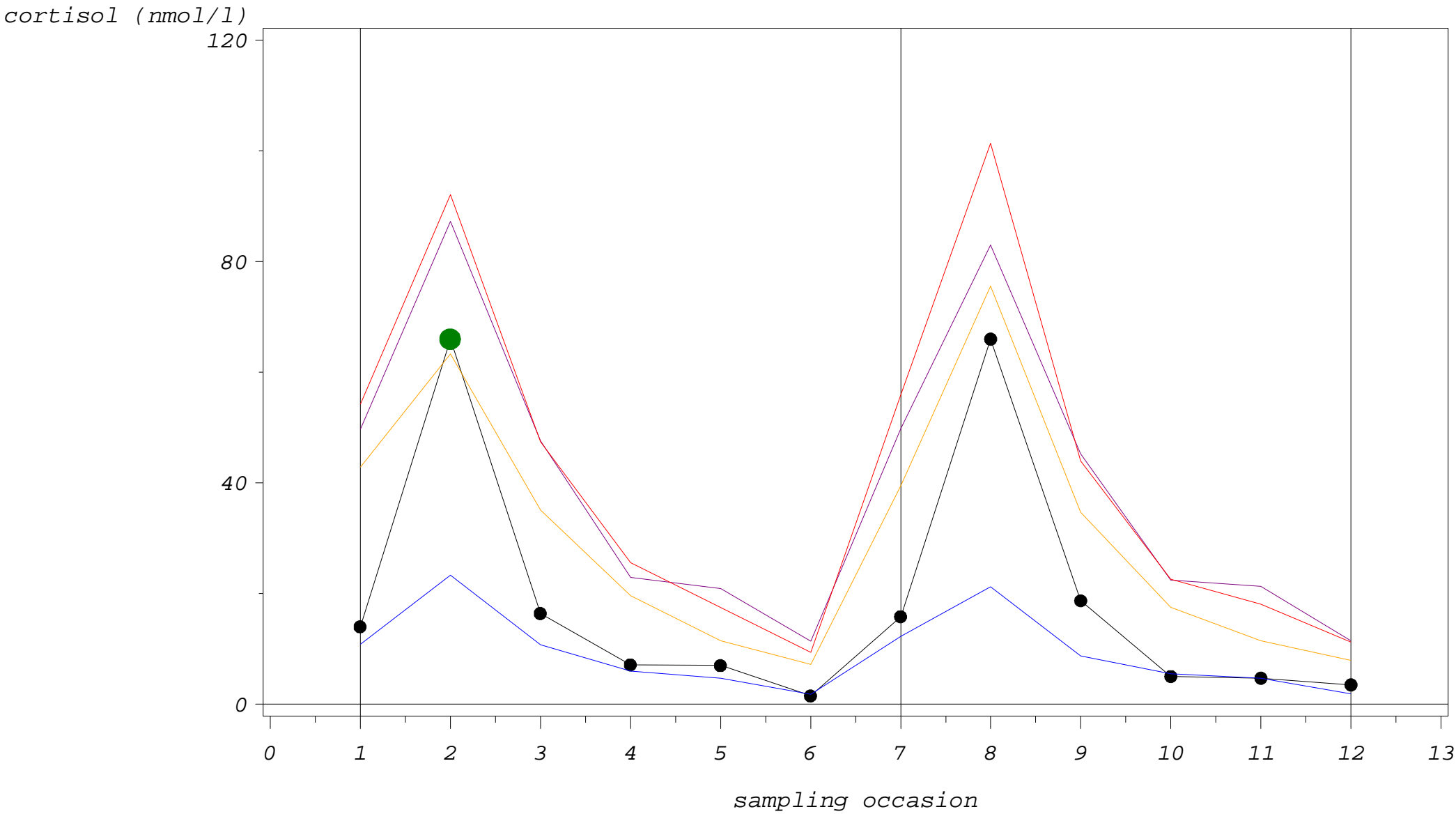
CODE=P02207



PLOT	●—●—●	Cortisol	—	Median	—	MW+(4*SD)
	—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●—●—●	cortisol-outlier

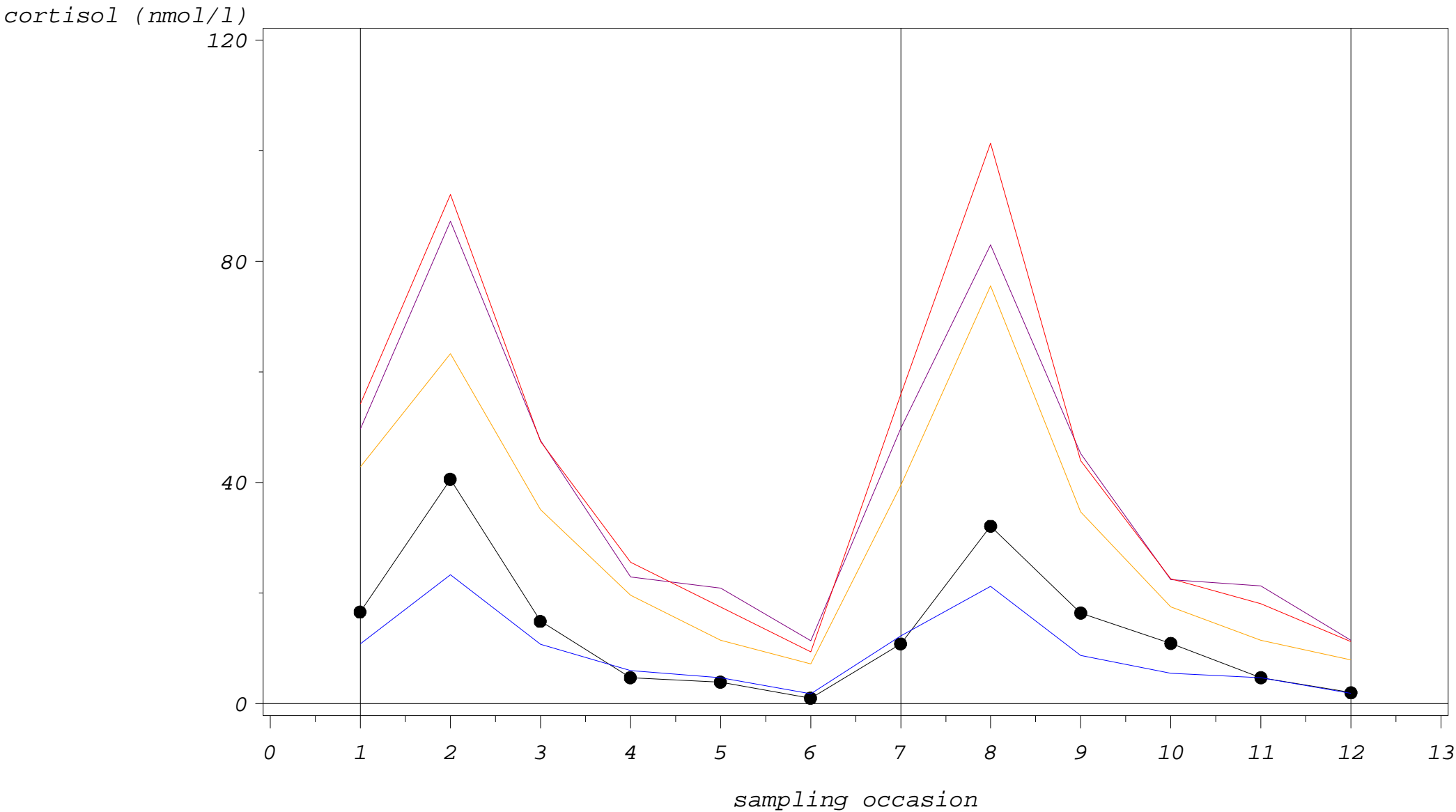
Study 1: cortisol single profiles with outlier fences

CODE=P02301



Study 1: cortisol single profiles with outlier fences

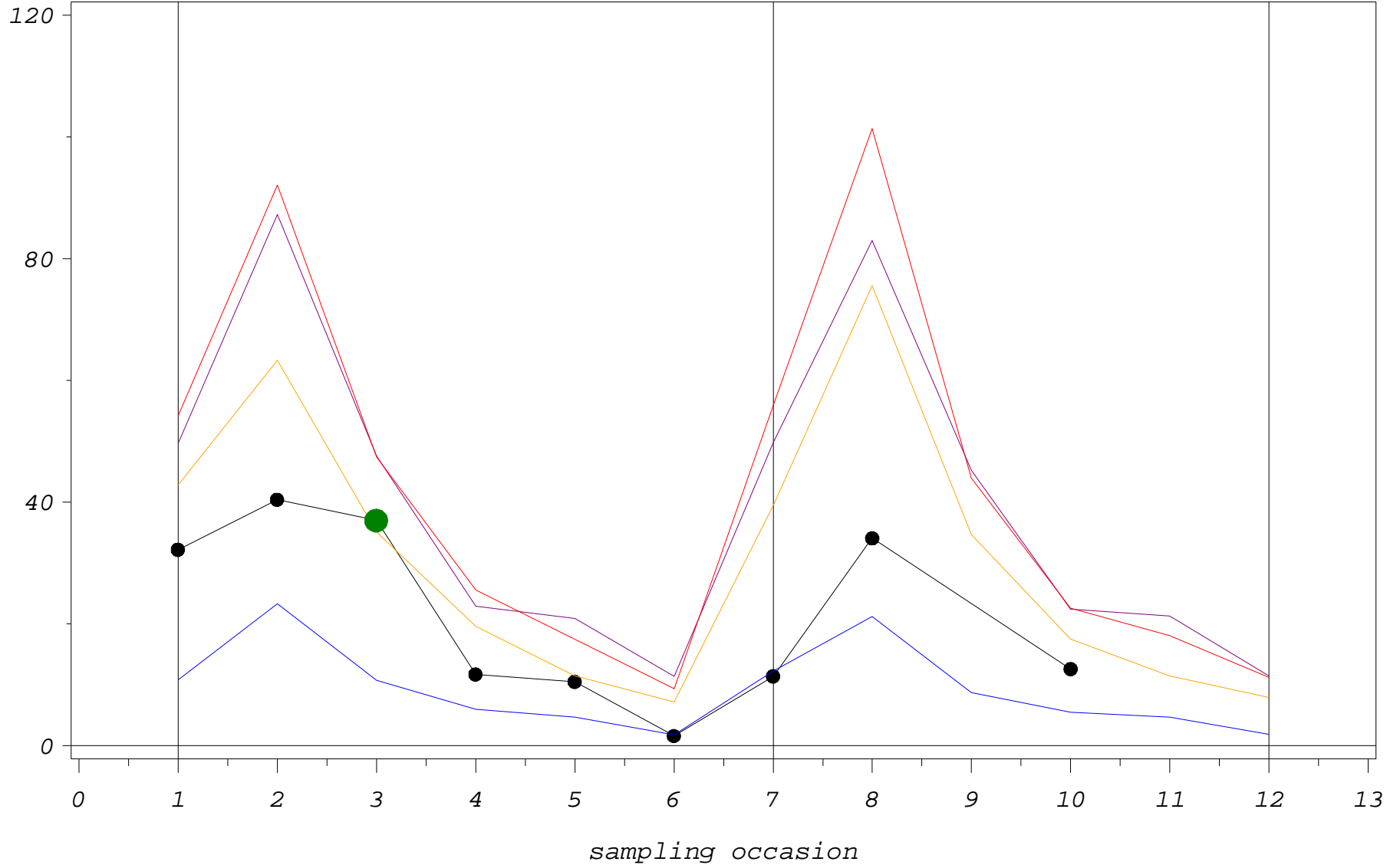
CODE=P02302



Study 1: cortisol single profiles with outlier fences

CODE=P02303

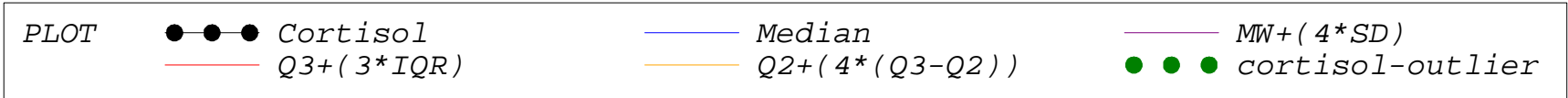
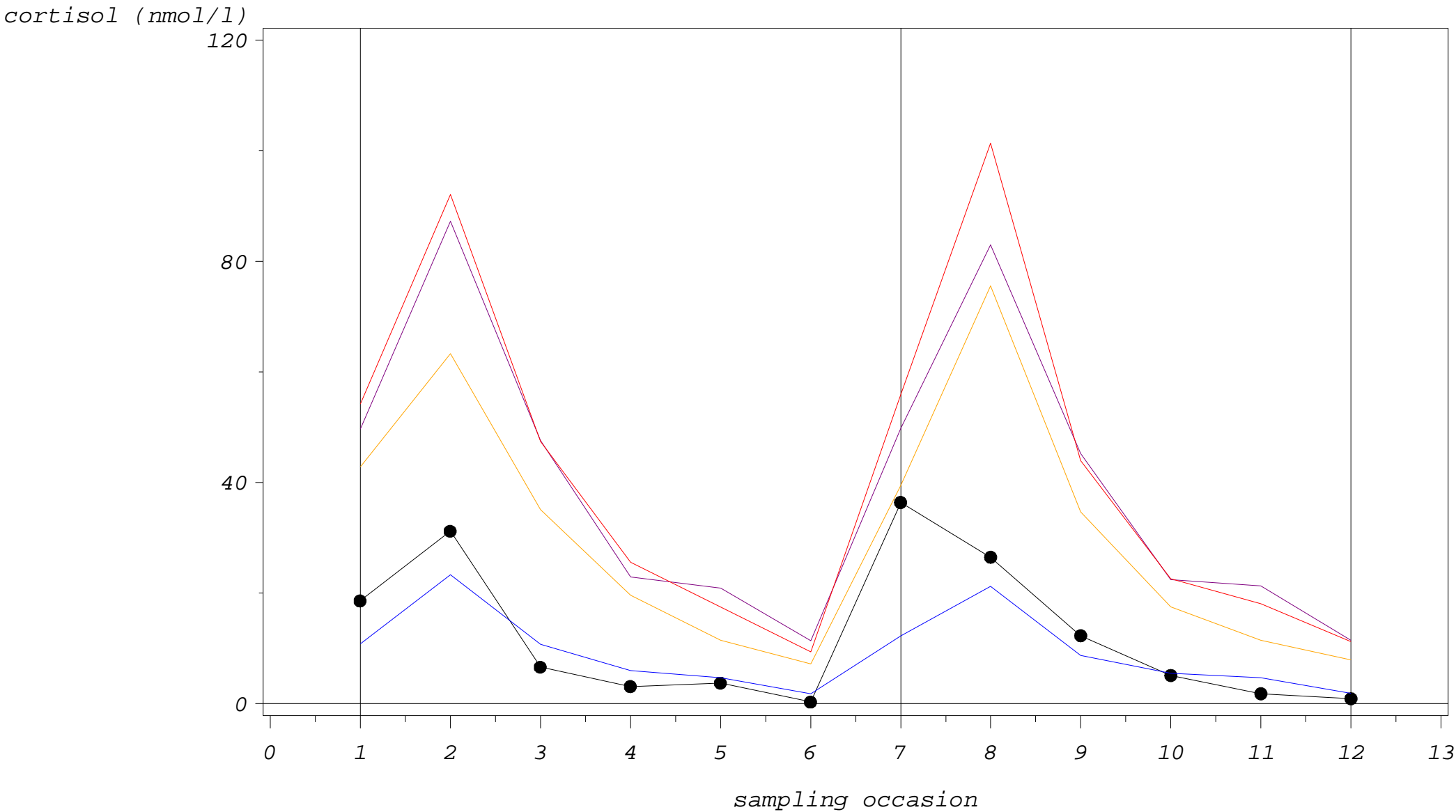
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

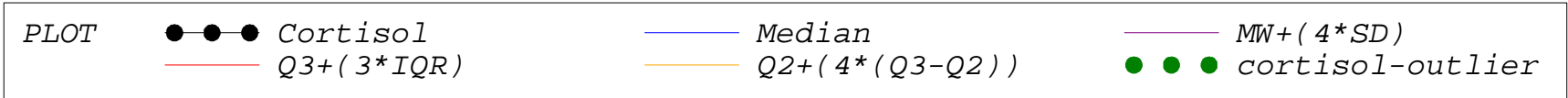
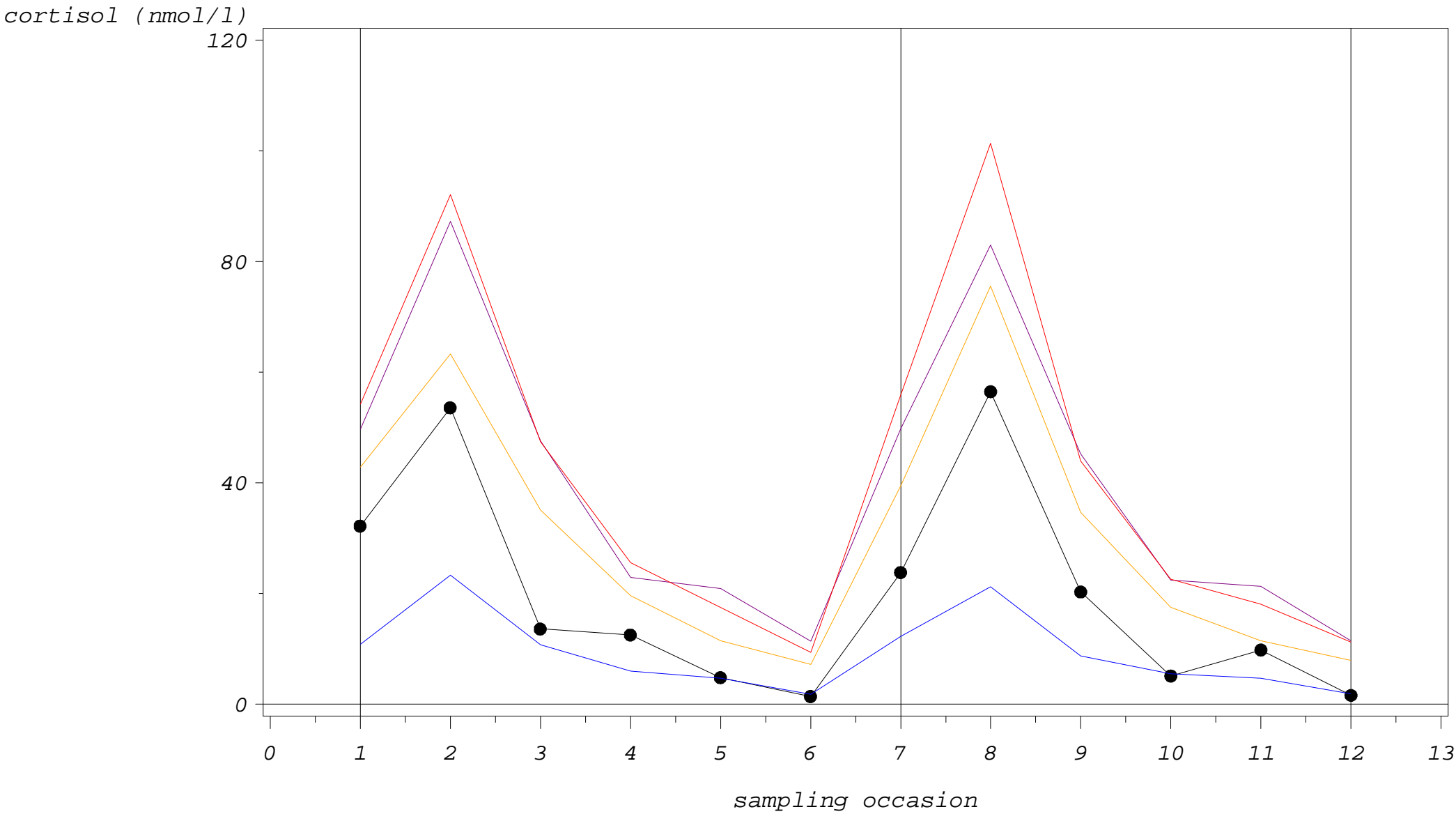
Study 1: cortisol single profiles with outlier fences

CODE=P02304



Study 1: cortisol single profiles with outlier fences

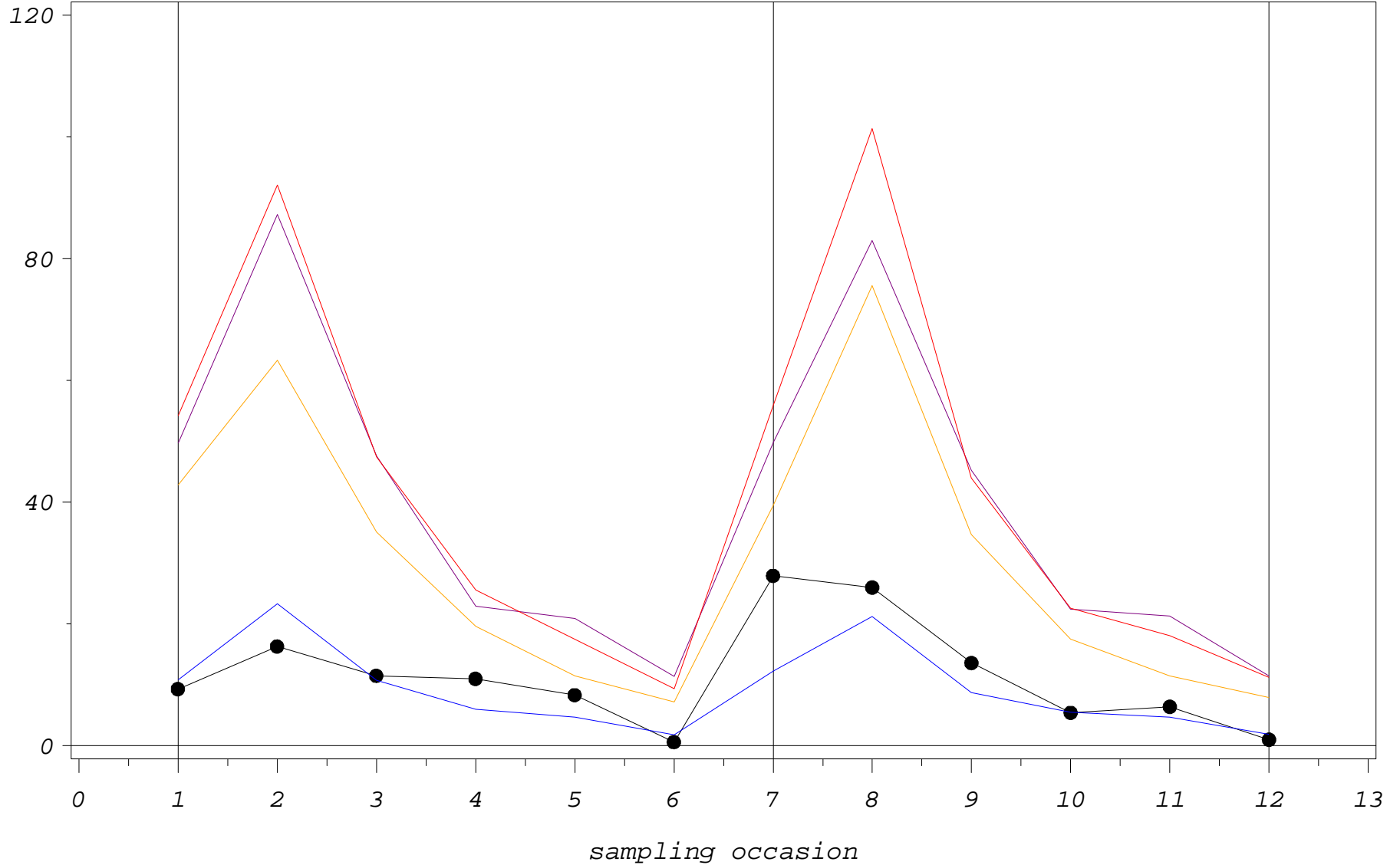
CODE=P02305



Study 1: cortisol single profiles with outlier fences

CODE=P02306

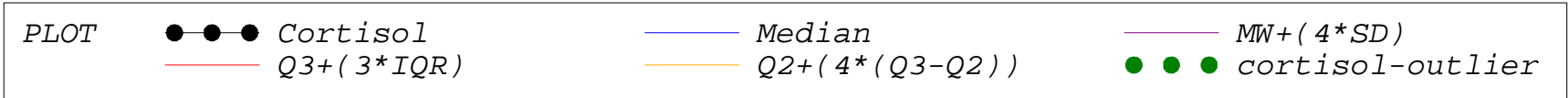
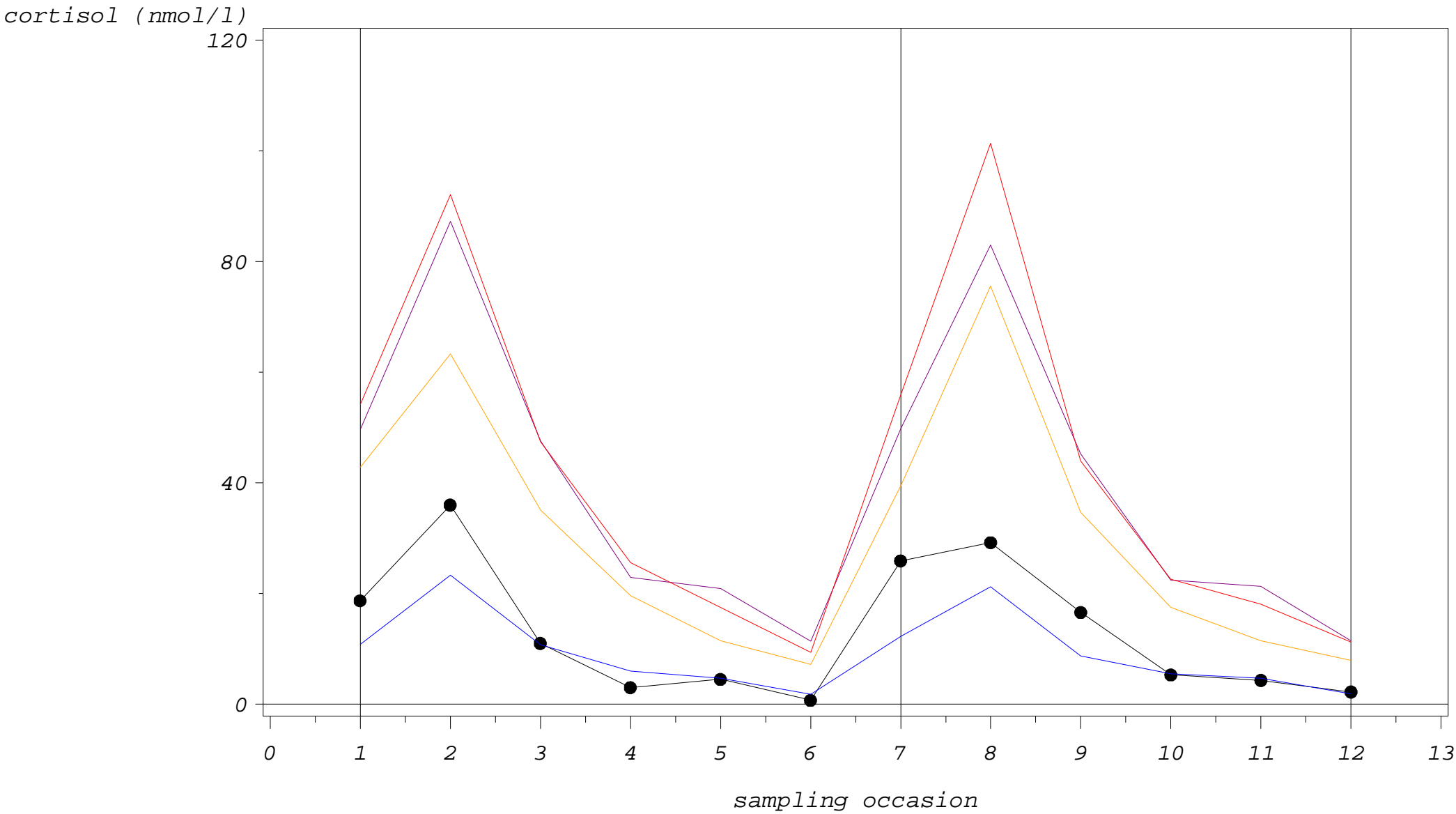
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

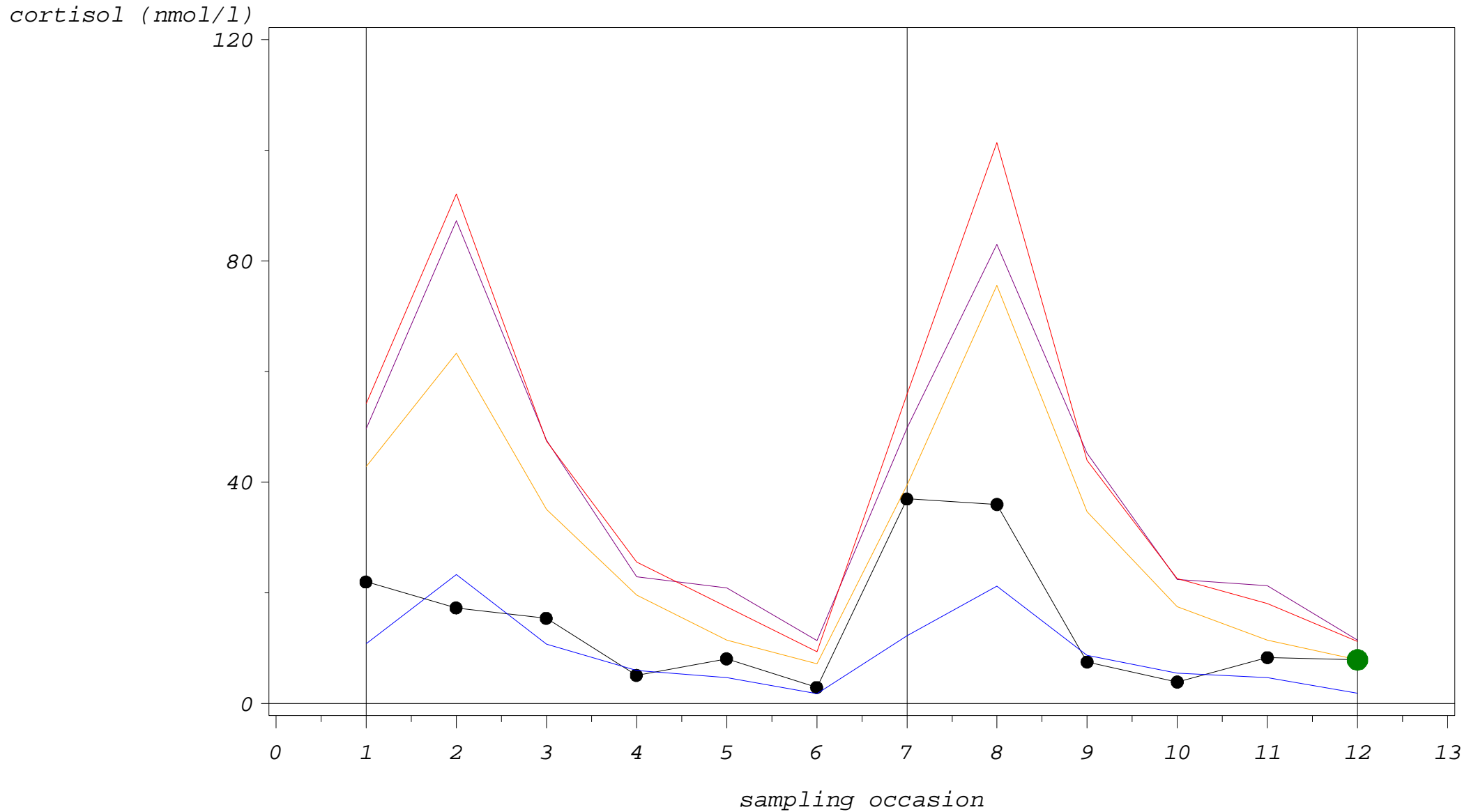
Study 1: cortisol single profiles with outlier fences

CODE=P02307



Study 1: cortisol single profiles with outlier fences

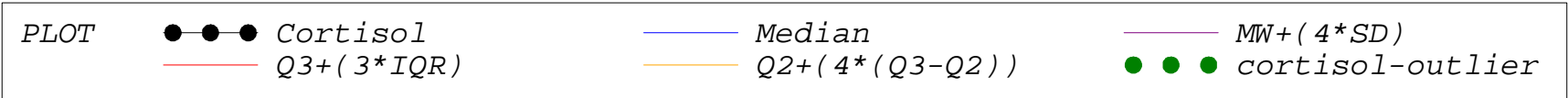
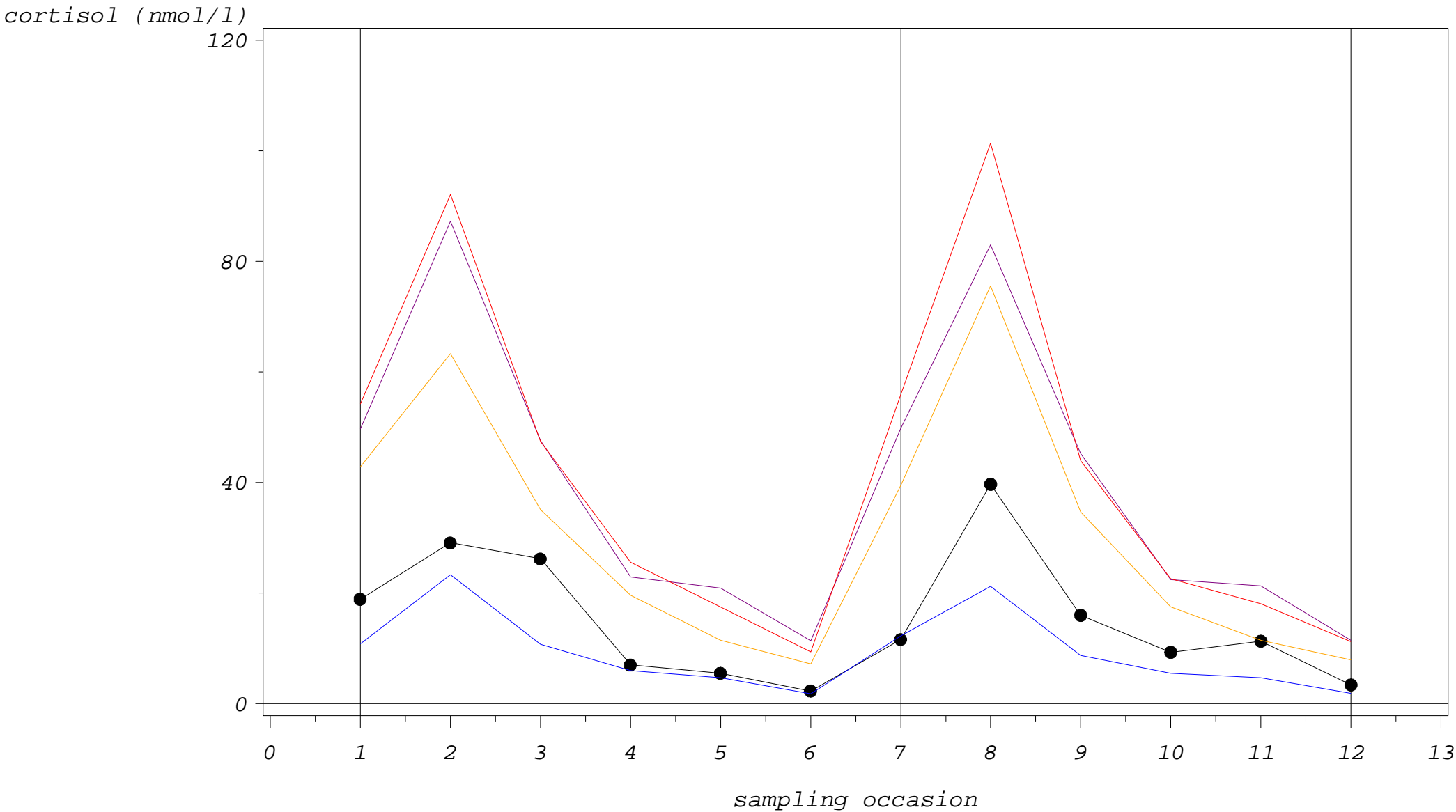
CODE=P02308



PLOT	●—●—●	Cortisol	—	Median	—	MW+(4*SD)
	—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●—●—●	cortisol-outlier

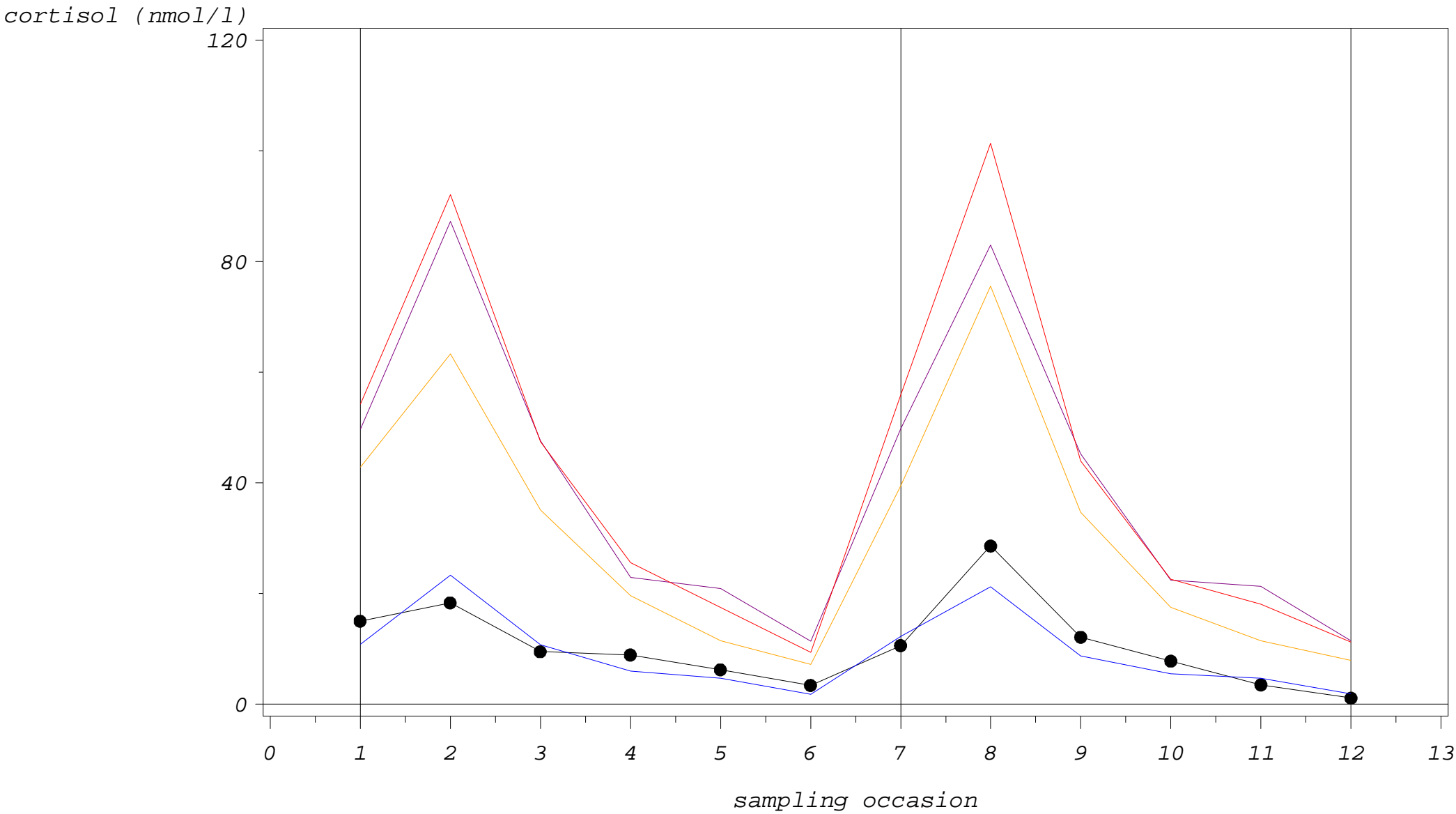
Study 1: cortisol single profiles with outlier fences

CODE=P02309



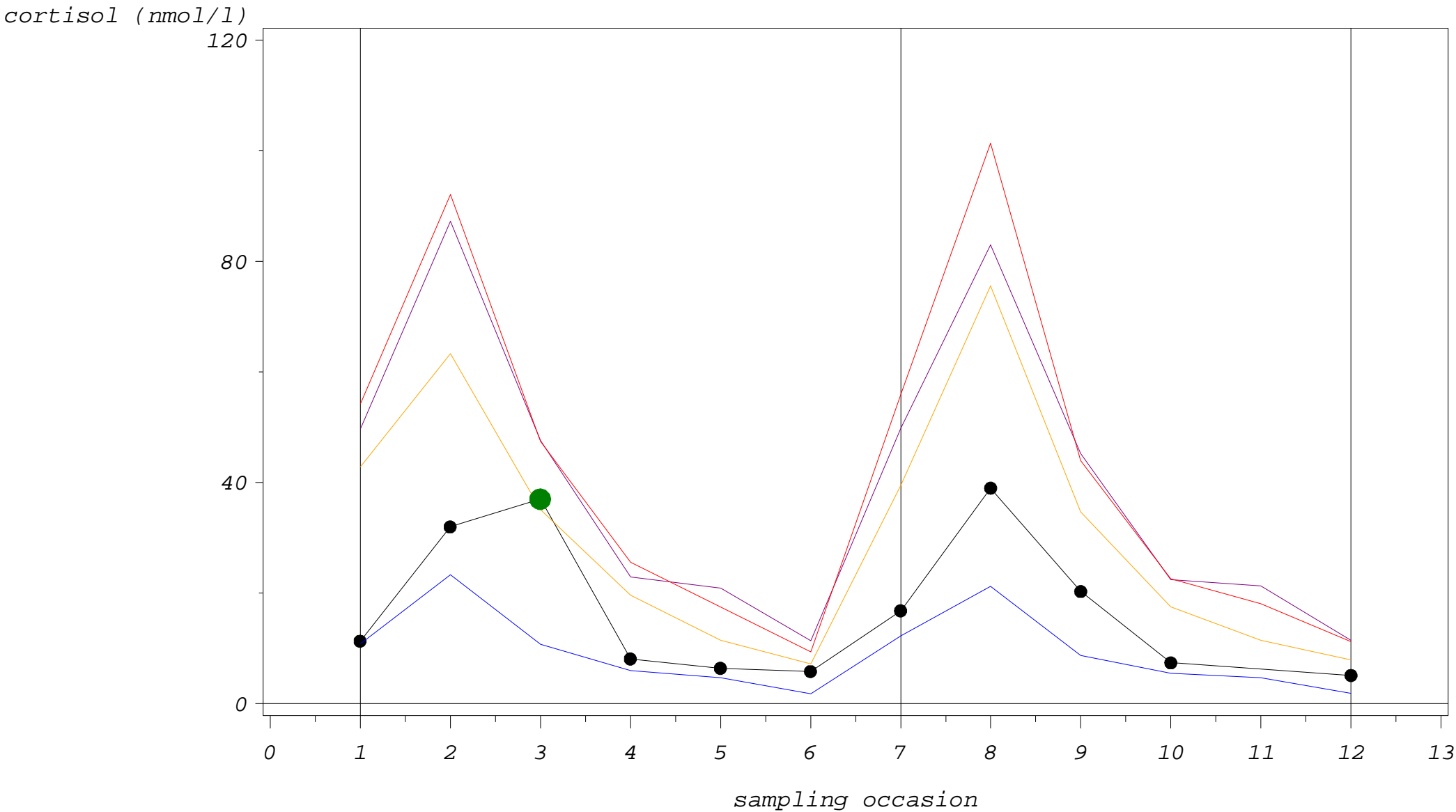
Study 1: cortisol single profiles with outlier fences

CODE=P02310



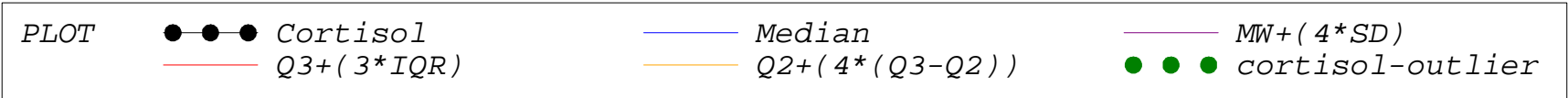
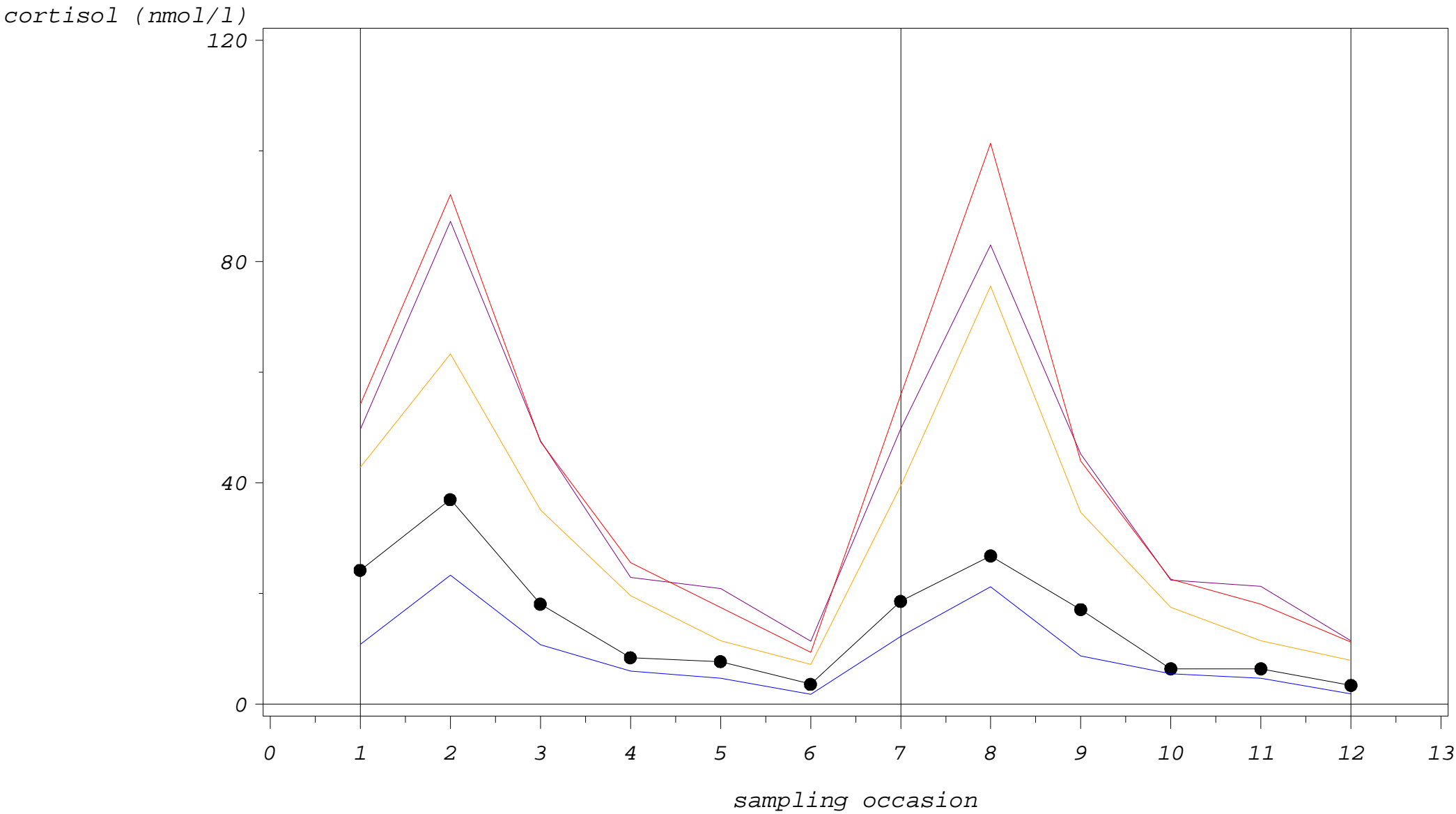
Study 1: cortisol single profiles with outlier fences

CODE=P03101



Study 1: cortisol single profiles with outlier fences

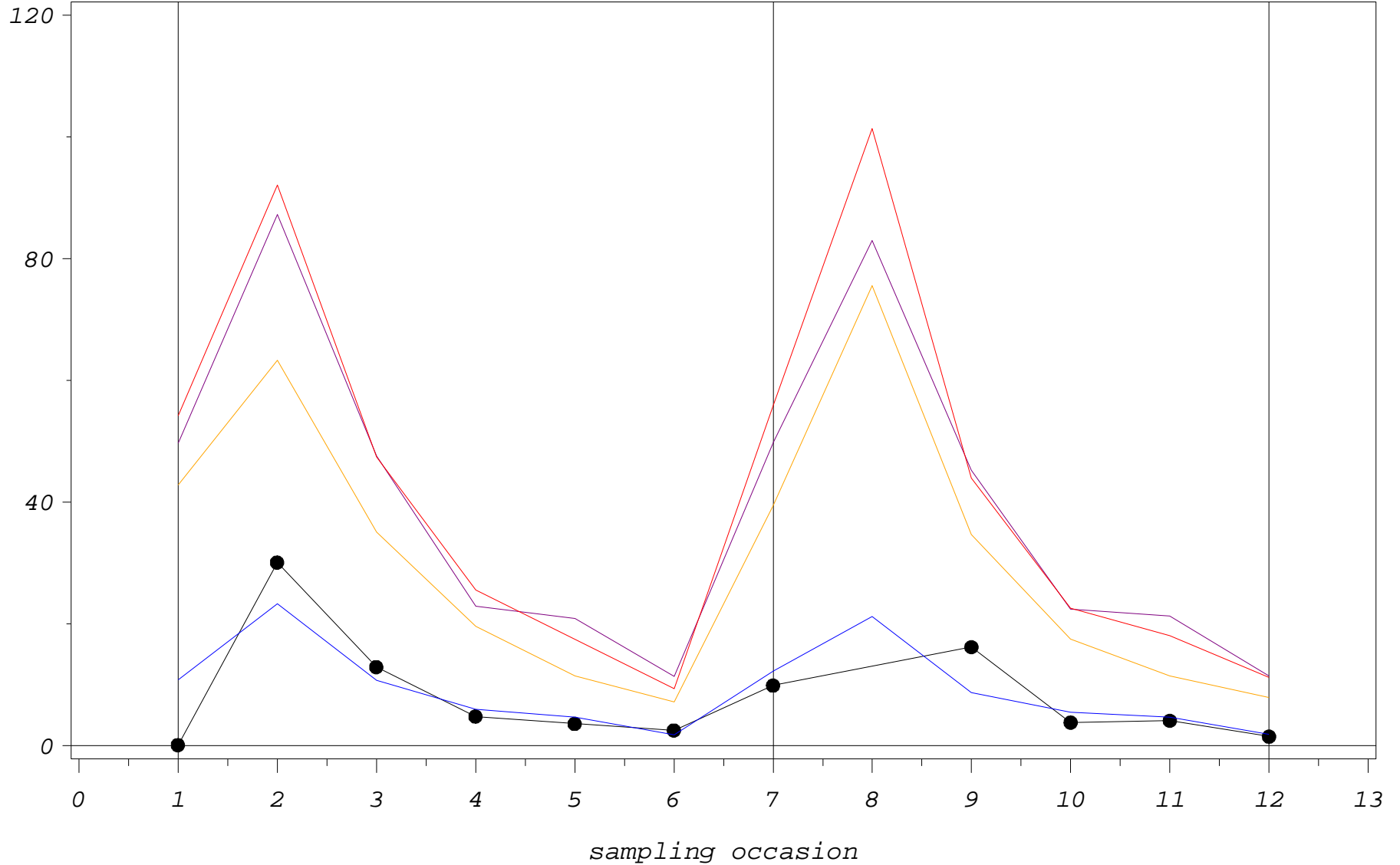
CODE=P03102



Study 1: cortisol single profiles with outlier fences

CODE=P03103

cortisol (nmol/l)

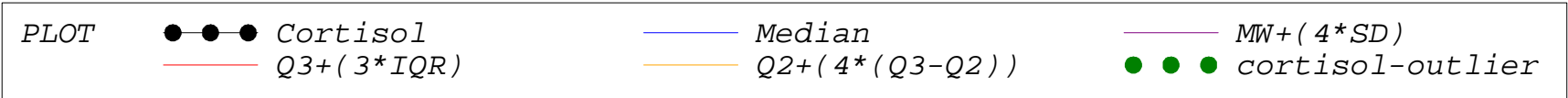
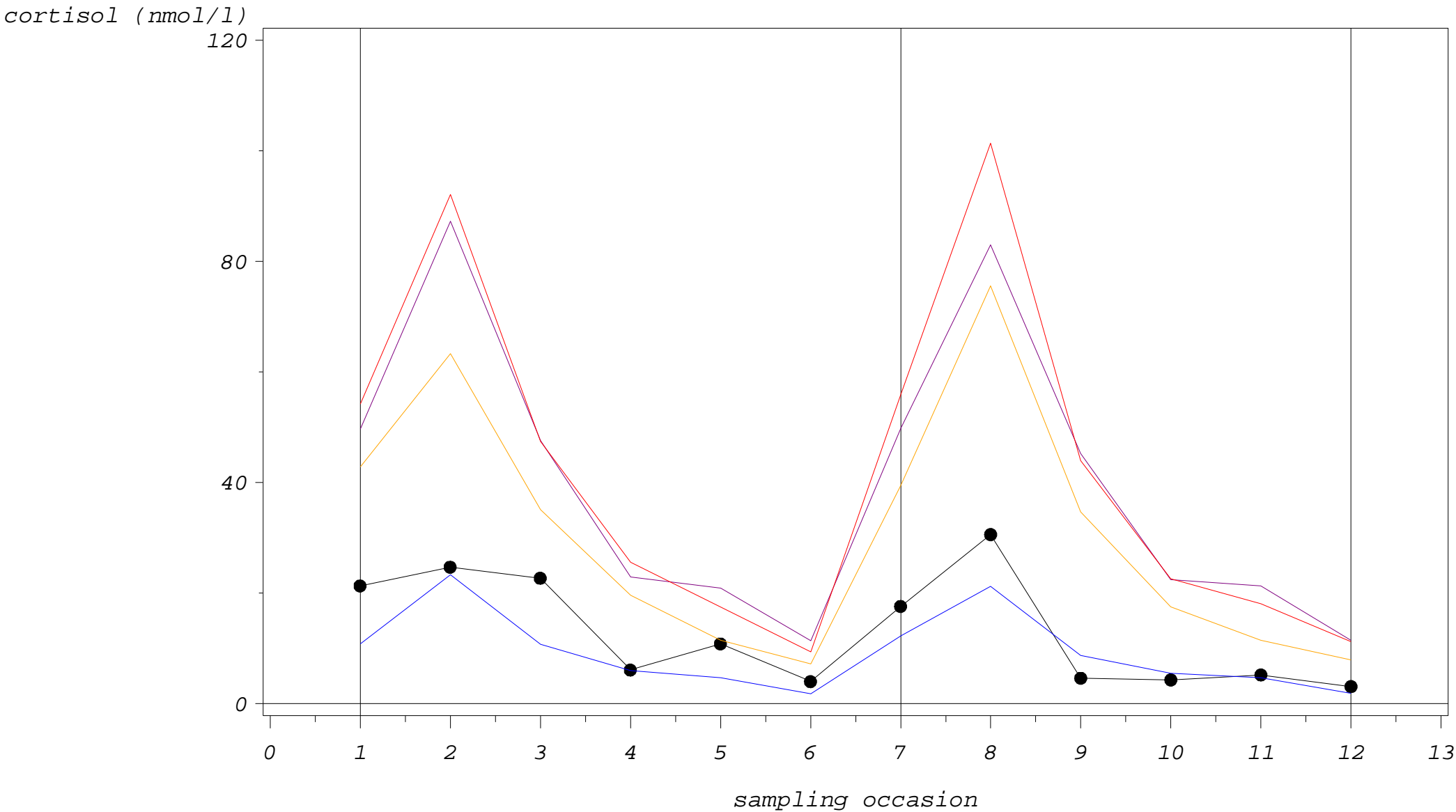


PLOT

●—●—●	Cortisol	—	Median	—	$MW + (4 * SD)$
—	$Q3 + (3 * IQR)$	—	$Q2 + (4 * (Q3 - Q2))$	●●●	cortisol-outlier

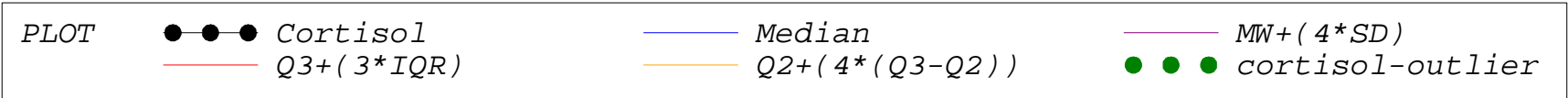
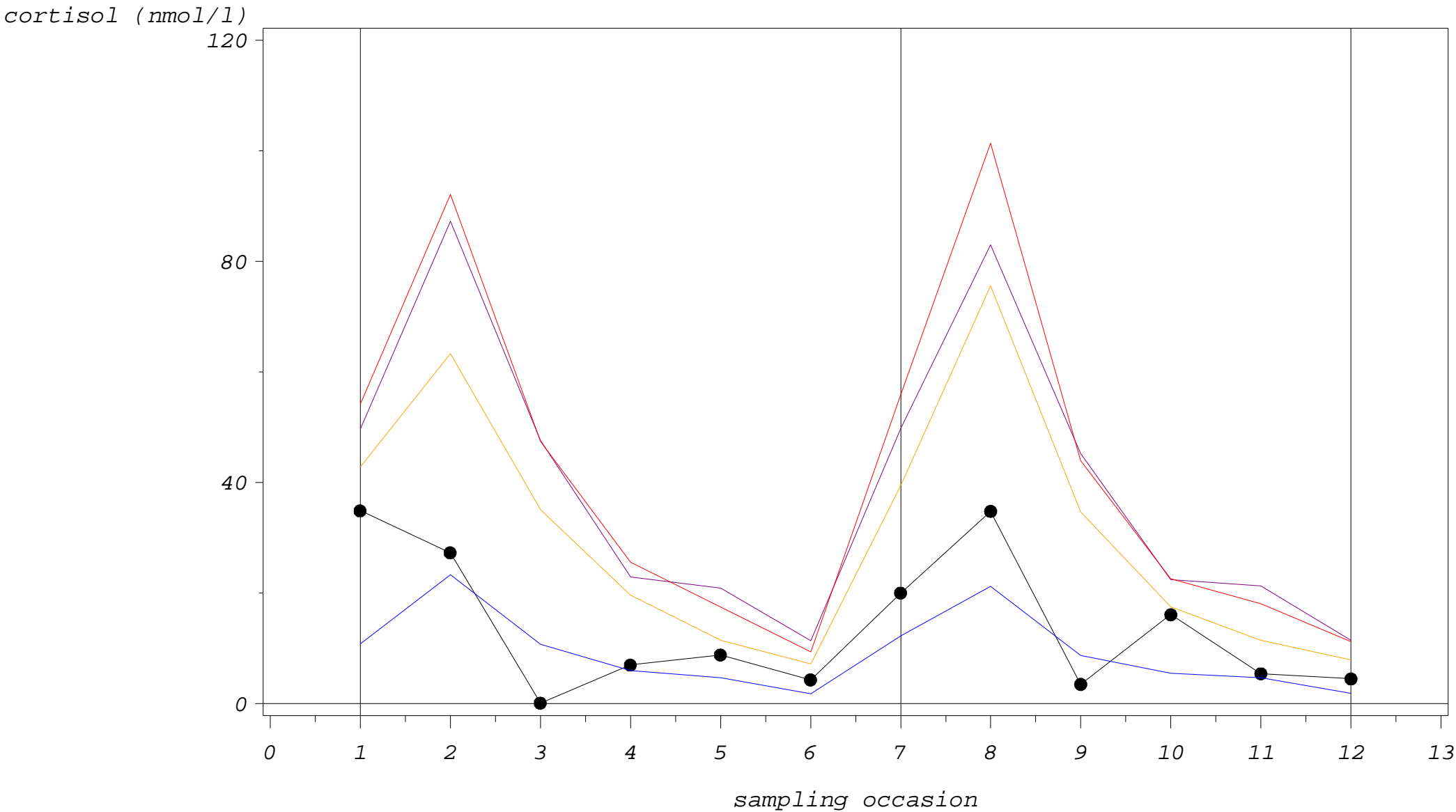
Study 1: cortisol single profiles with outlier fences

CODE=P03105



Study 1: cortisol single profiles with outlier fences

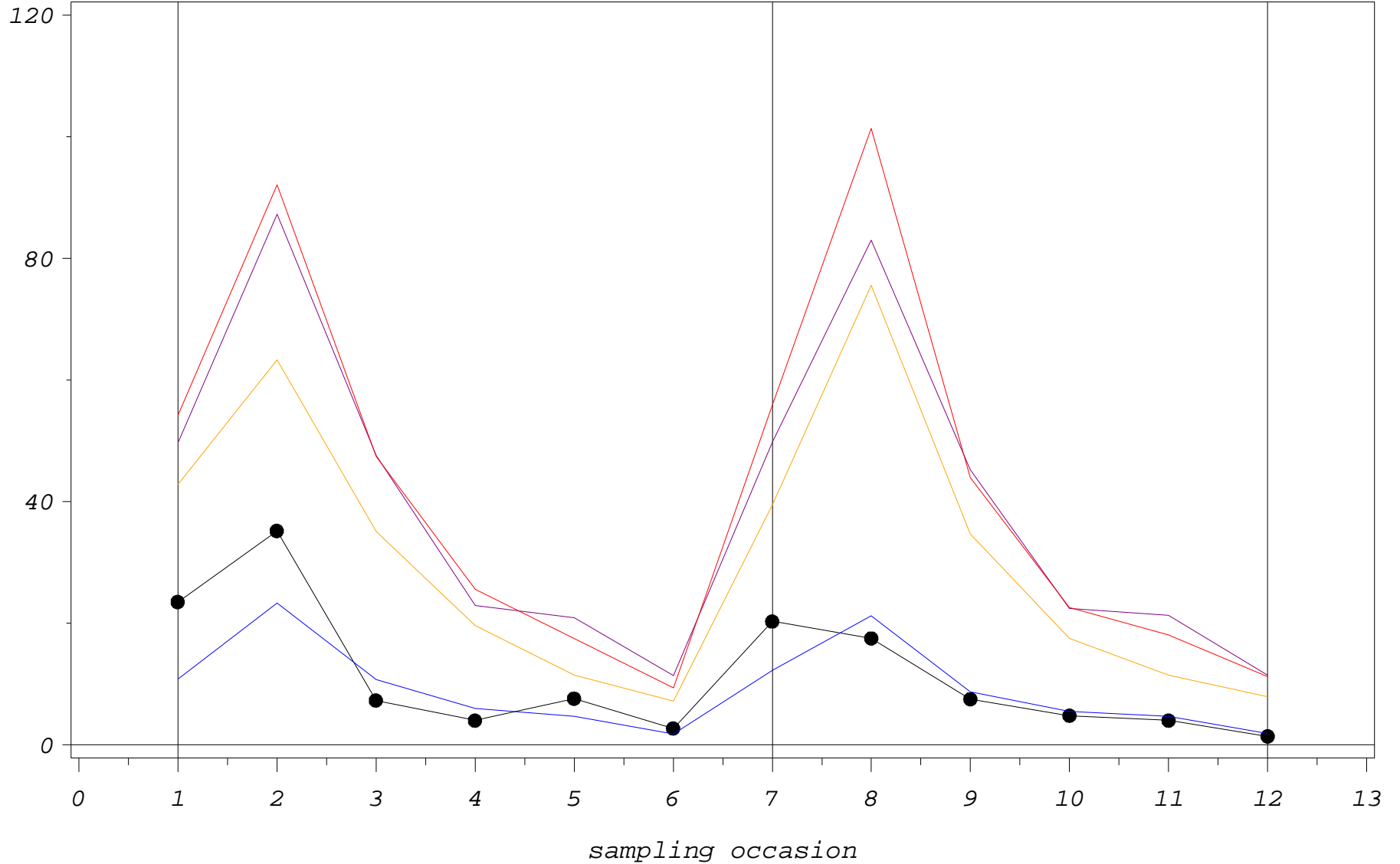
CODE=P03106



Study 1: cortisol single profiles with outlier fences

CODE=P03107

cortisol (nmol/l)

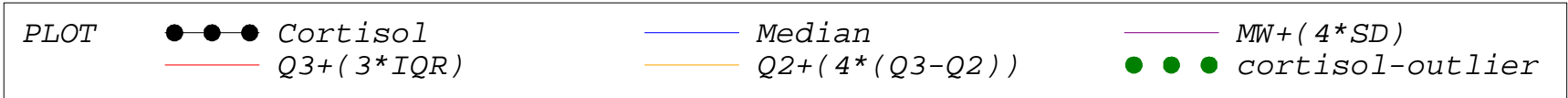
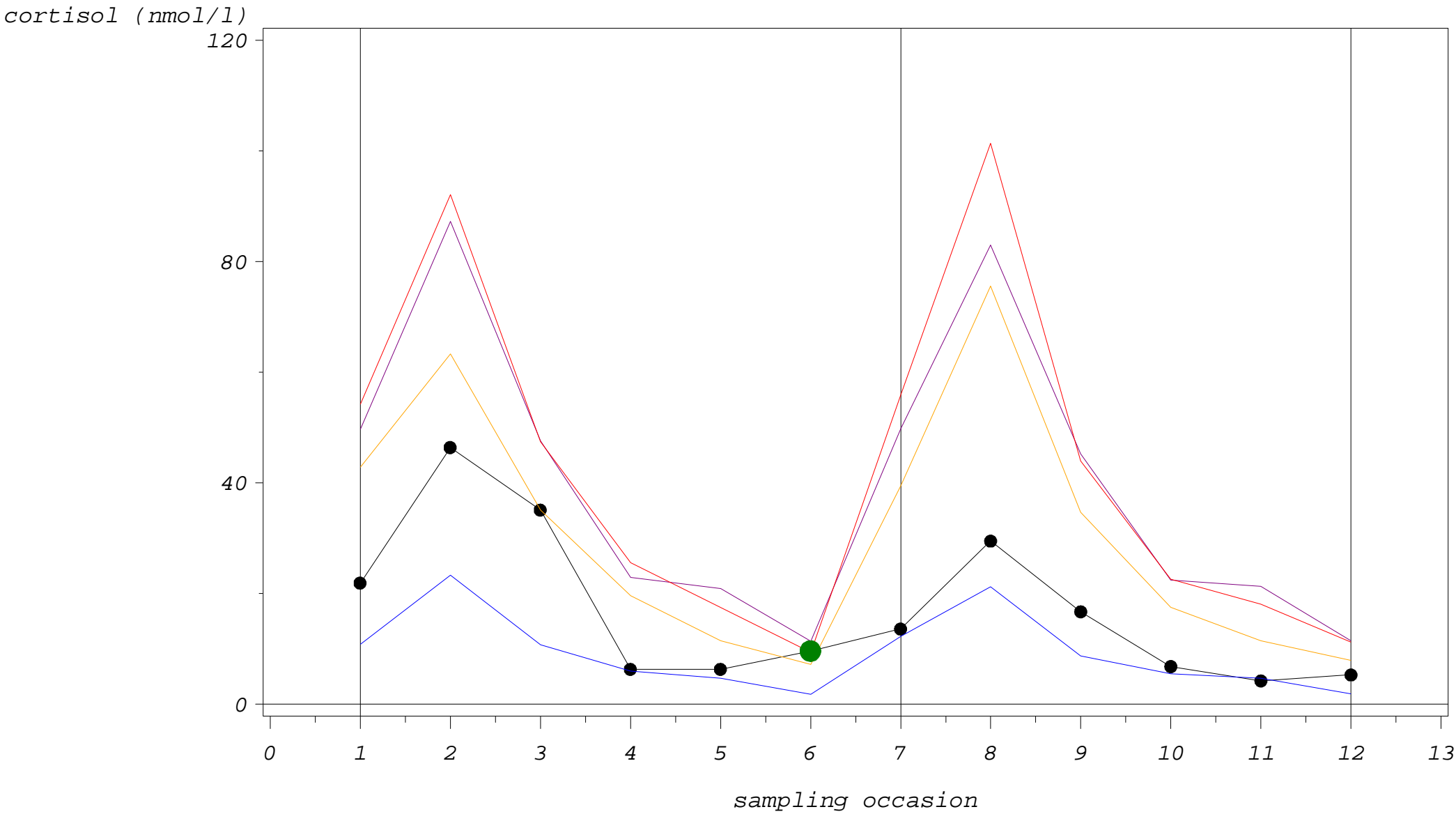


PLOT

●—●—●	Cortisol	—	Median	—	$MW+(4*SD)$
—	$Q3+(3*IQR)$	—	$Q2+(4*(Q3-Q2))$	●●●	cortisol-outlier

Study 1: cortisol single profiles with outlier fences

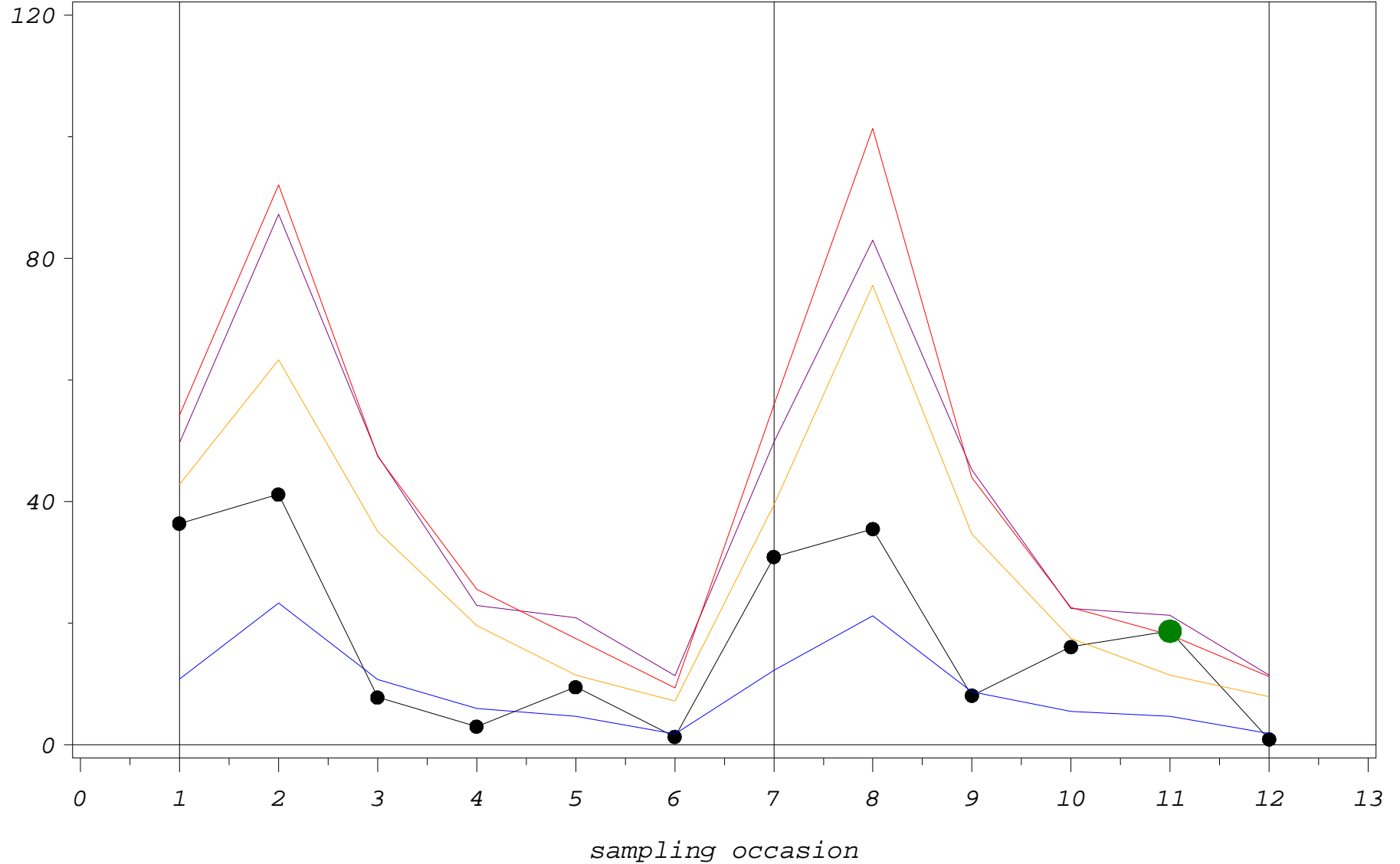
CODE=P03108



Study 1: cortisol single profiles with outlier fences

CODE=P03109

cortisol (nmol/l)

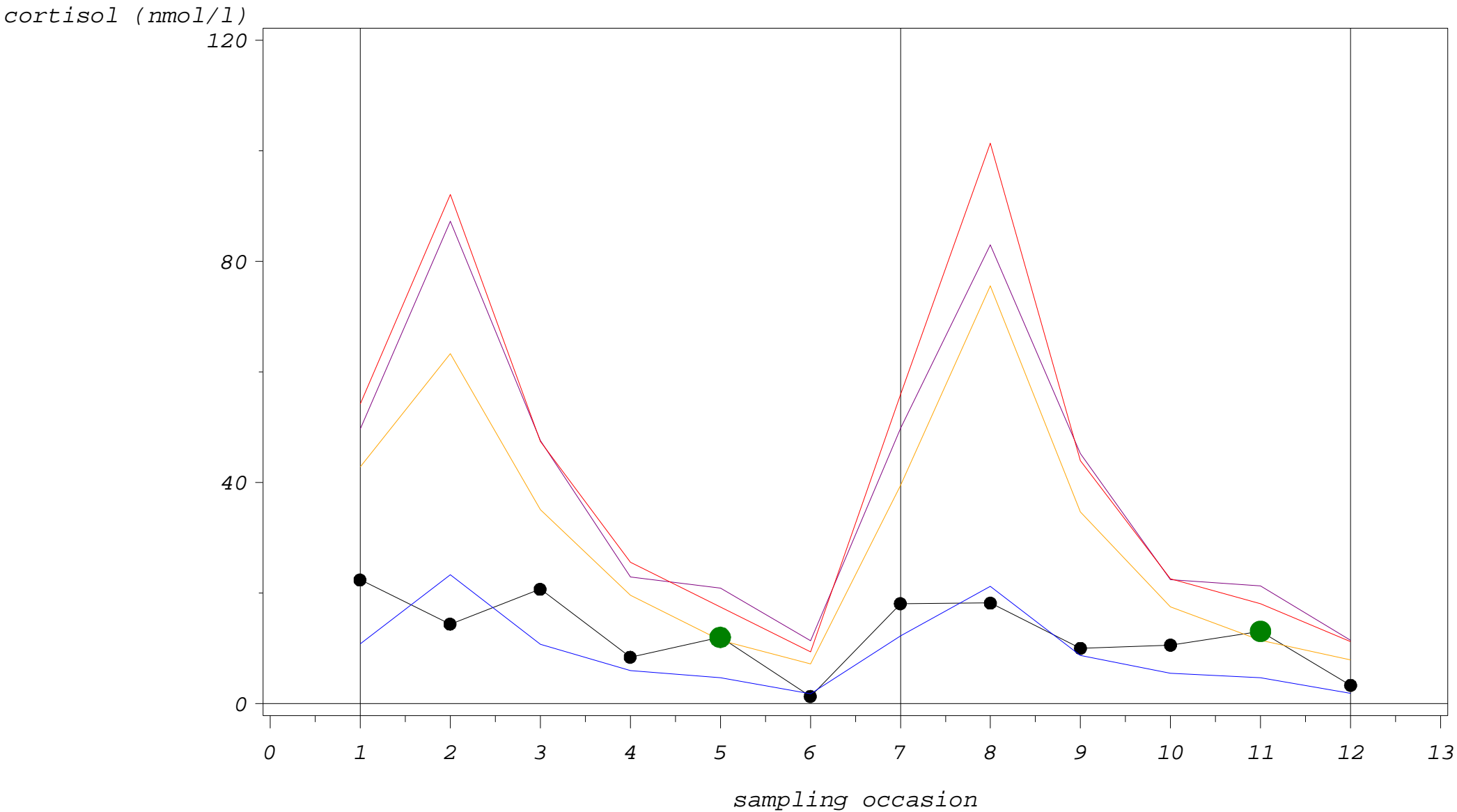


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 1: cortisol single profiles with outlier fences

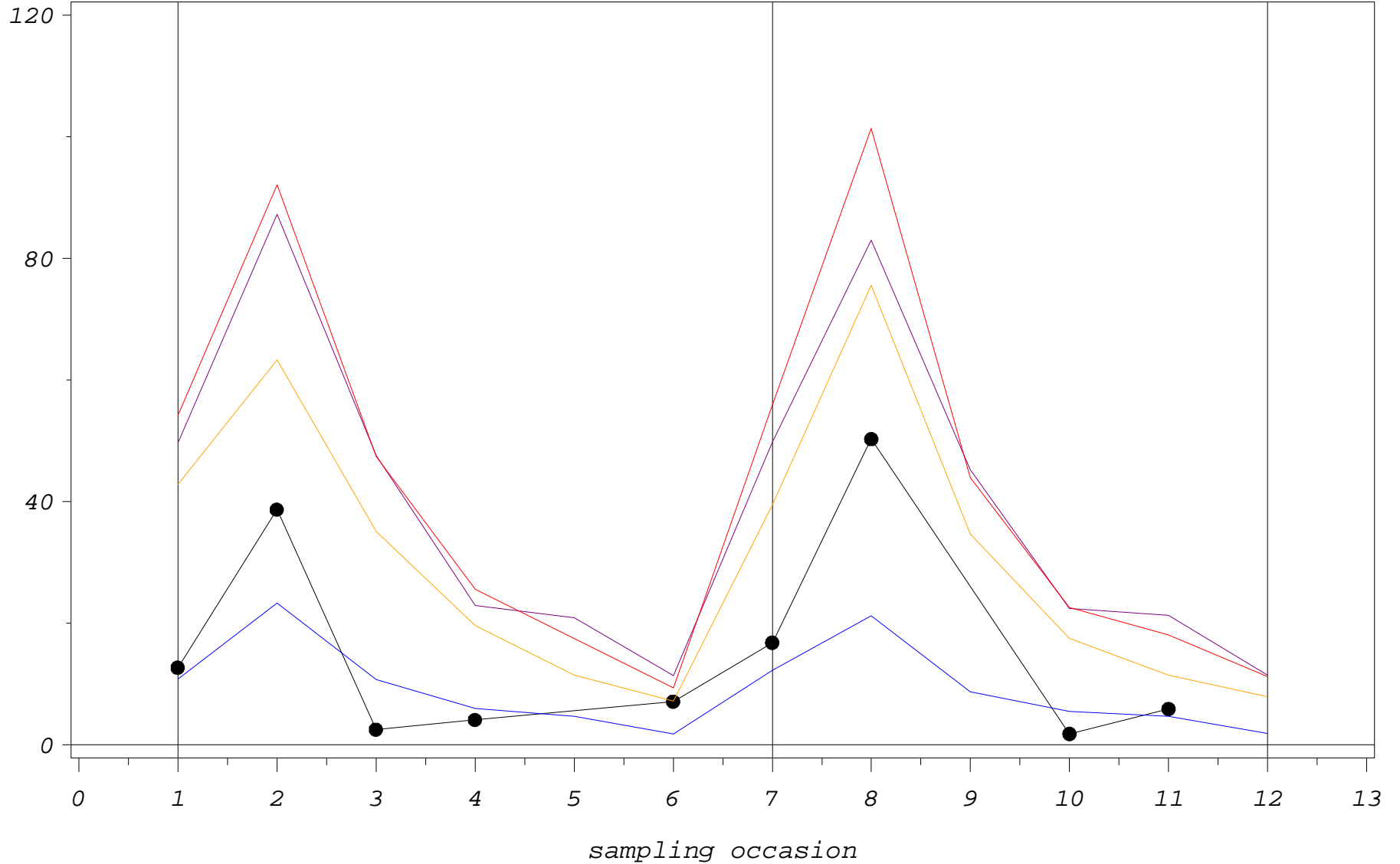
CODE=P03110



Study 1: cortisol single profiles with outlier fences

CODE=P03111

cortisol (nmol/l)



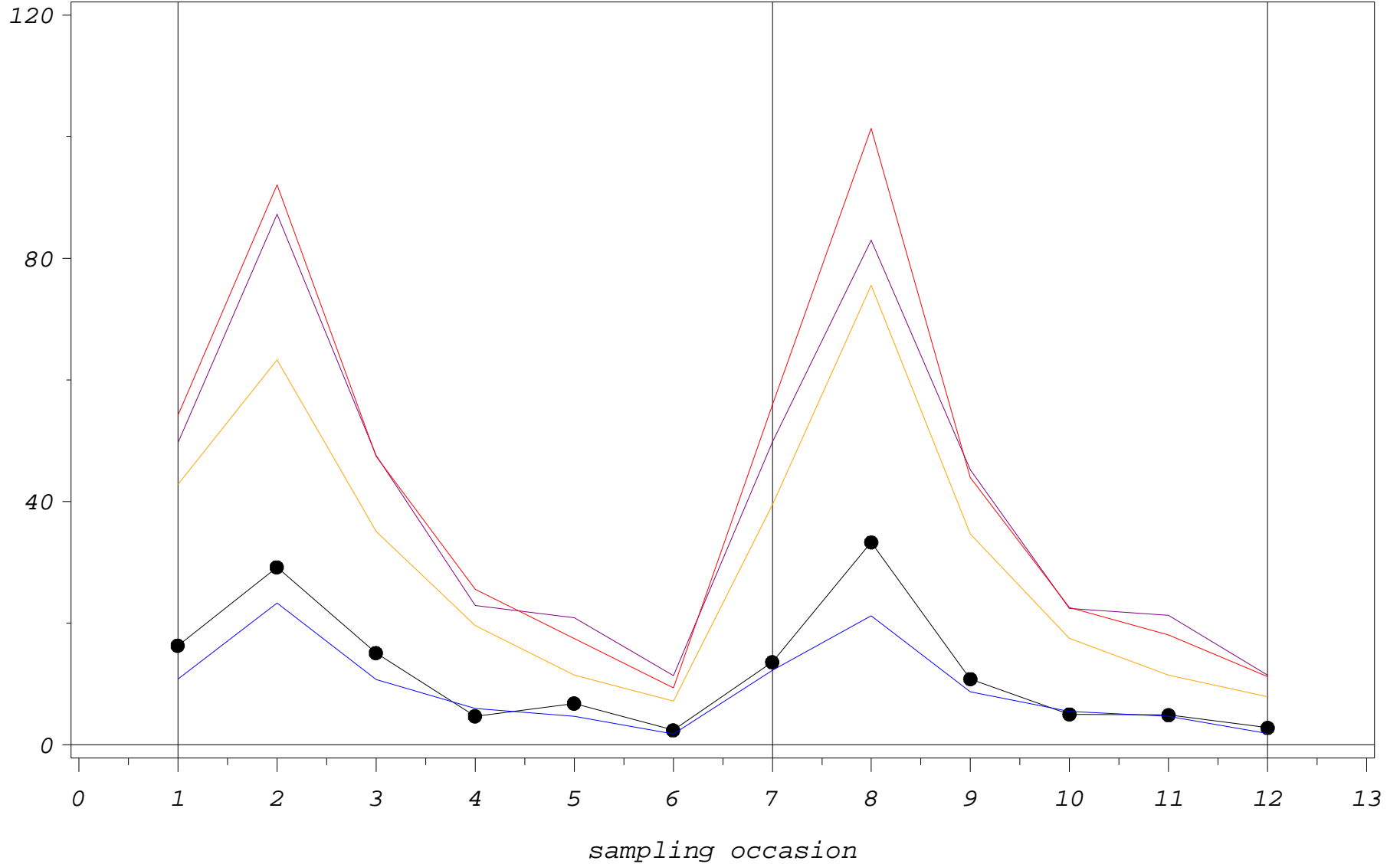
PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 1: cortisol single profiles with outlier fences

CODE=P03112

cortisol (nmol/l)



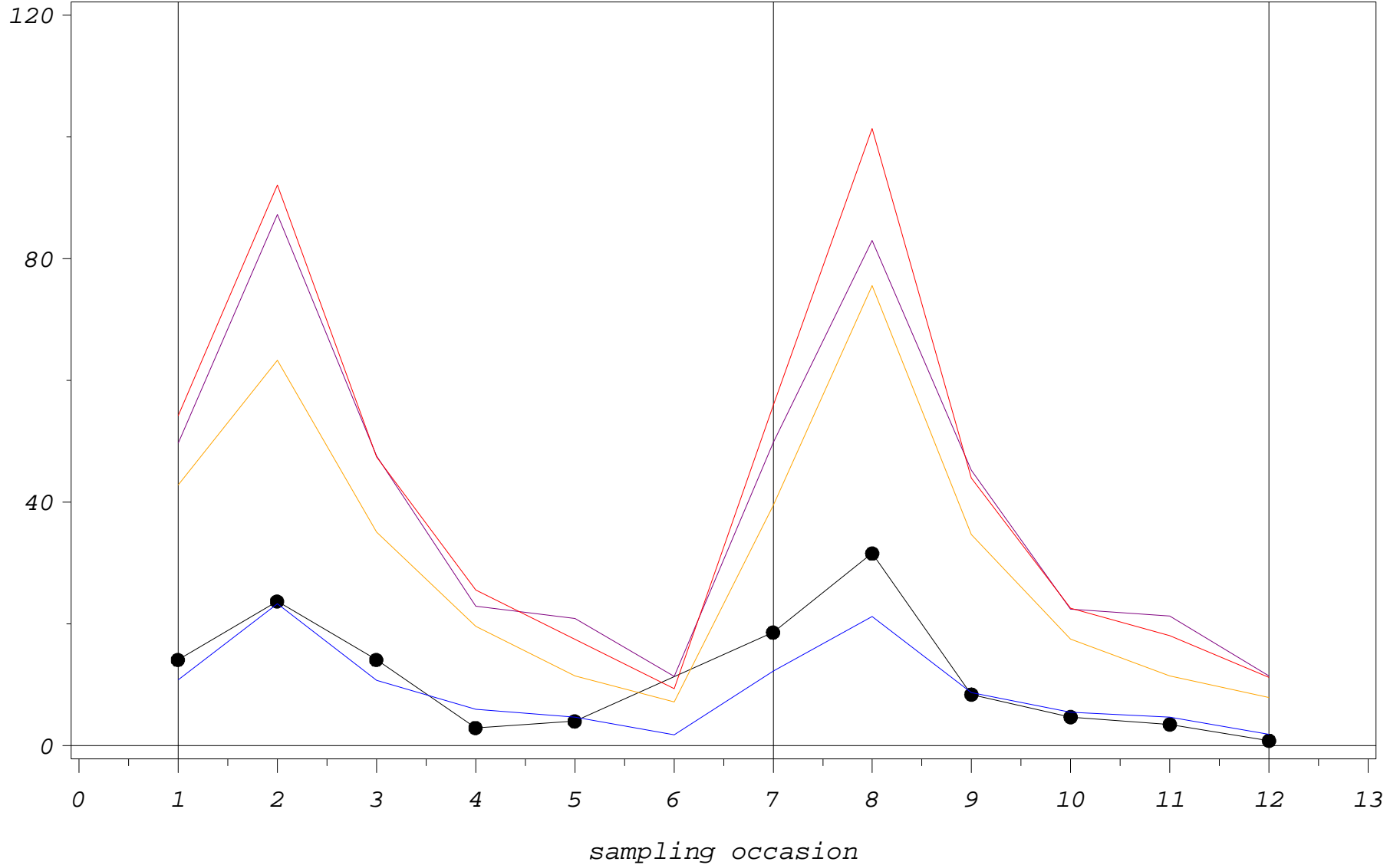
PLOT

●—●—●	Cortisol	—	Median	—	$MW + (4 * SD)$
—	$Q3 + (3 * IQR)$	—	$Q2 + (4 * (Q3 - Q2))$	●●●	cortisol-outlier

Study 1: cortisol single profiles with outlier fences

CODE=P03113

cortisol (nmol/l)



PLOT

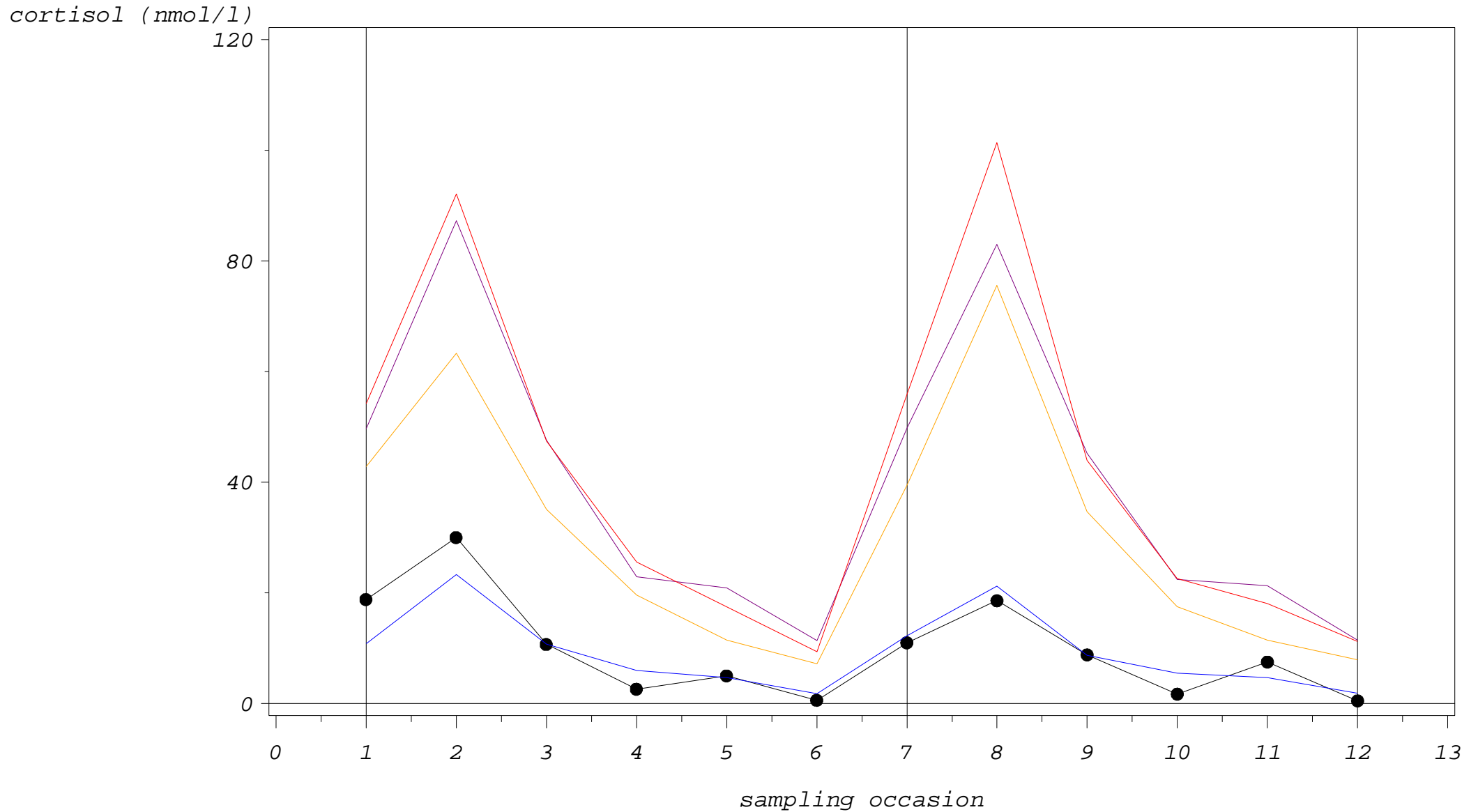
●—●—● Cortisol
— Q3+(3*IQR)

— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
● ● ● cortisol-outlier

Study 1: cortisol single profiles with outlier fences

CODE=P03201

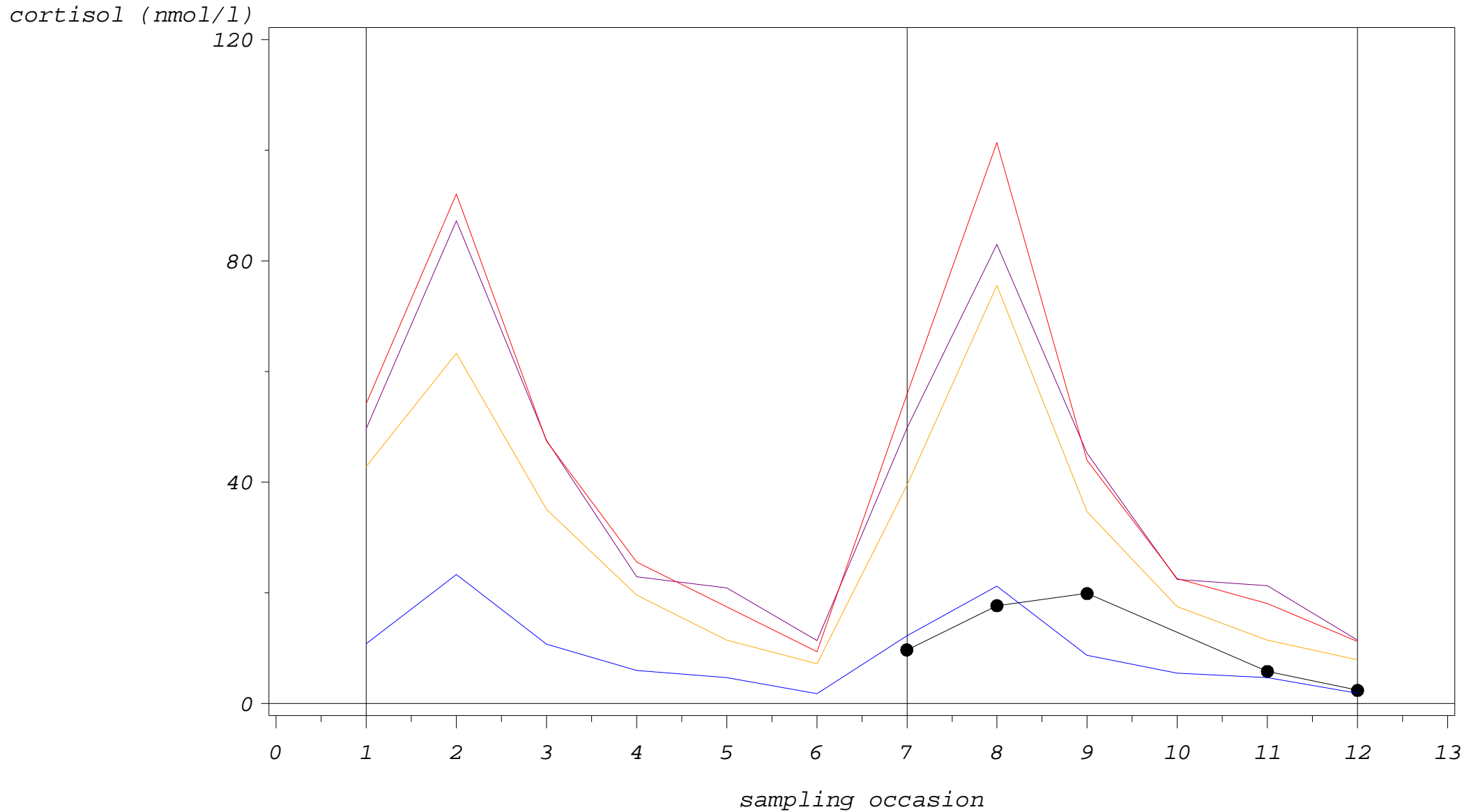


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 1: cortisol single profiles with outlier fences

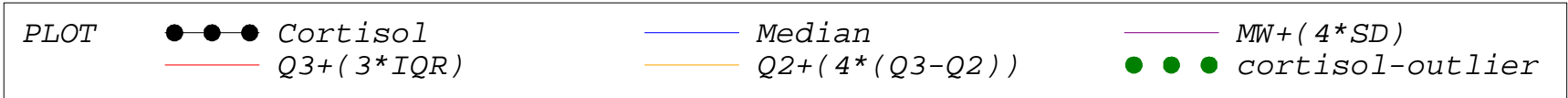
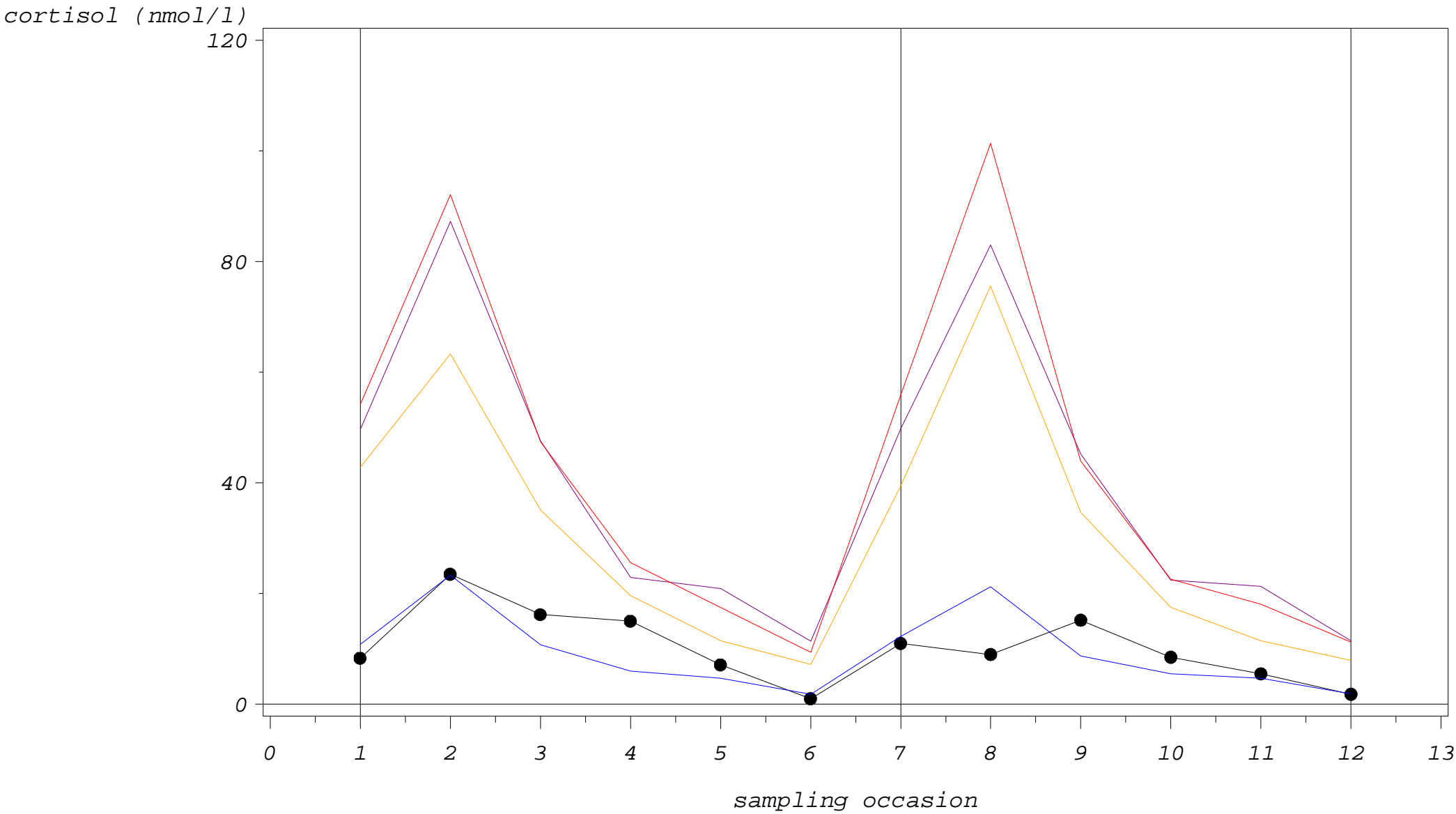
CODE=P03202



PLOT	●—●—●	Cortisol	—	Median	—	MW+(4*SD)
	—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

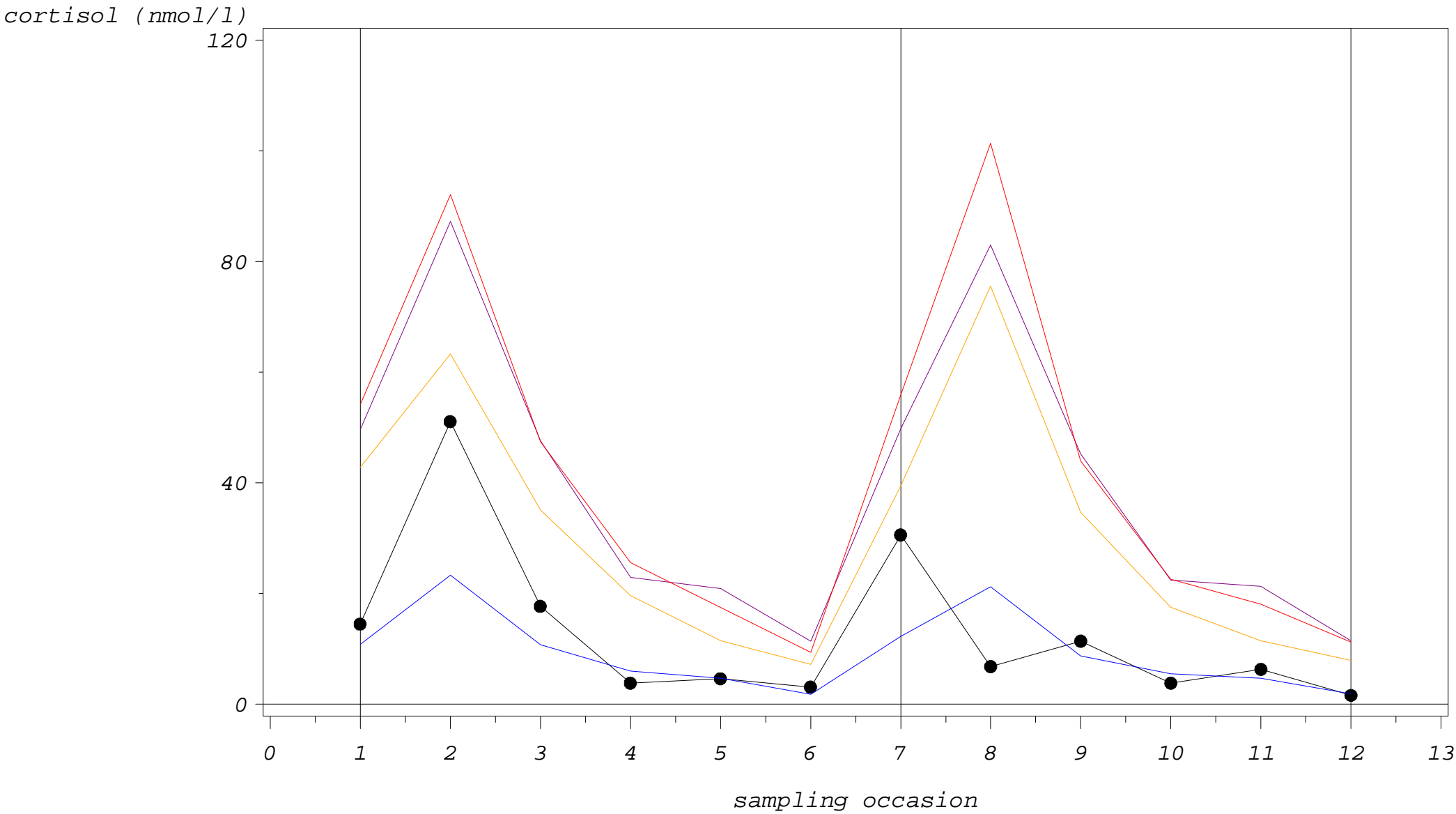
Study 1: cortisol single profiles with outlier fences

CODE=P03203



Study 1: cortisol single profiles with outlier fences

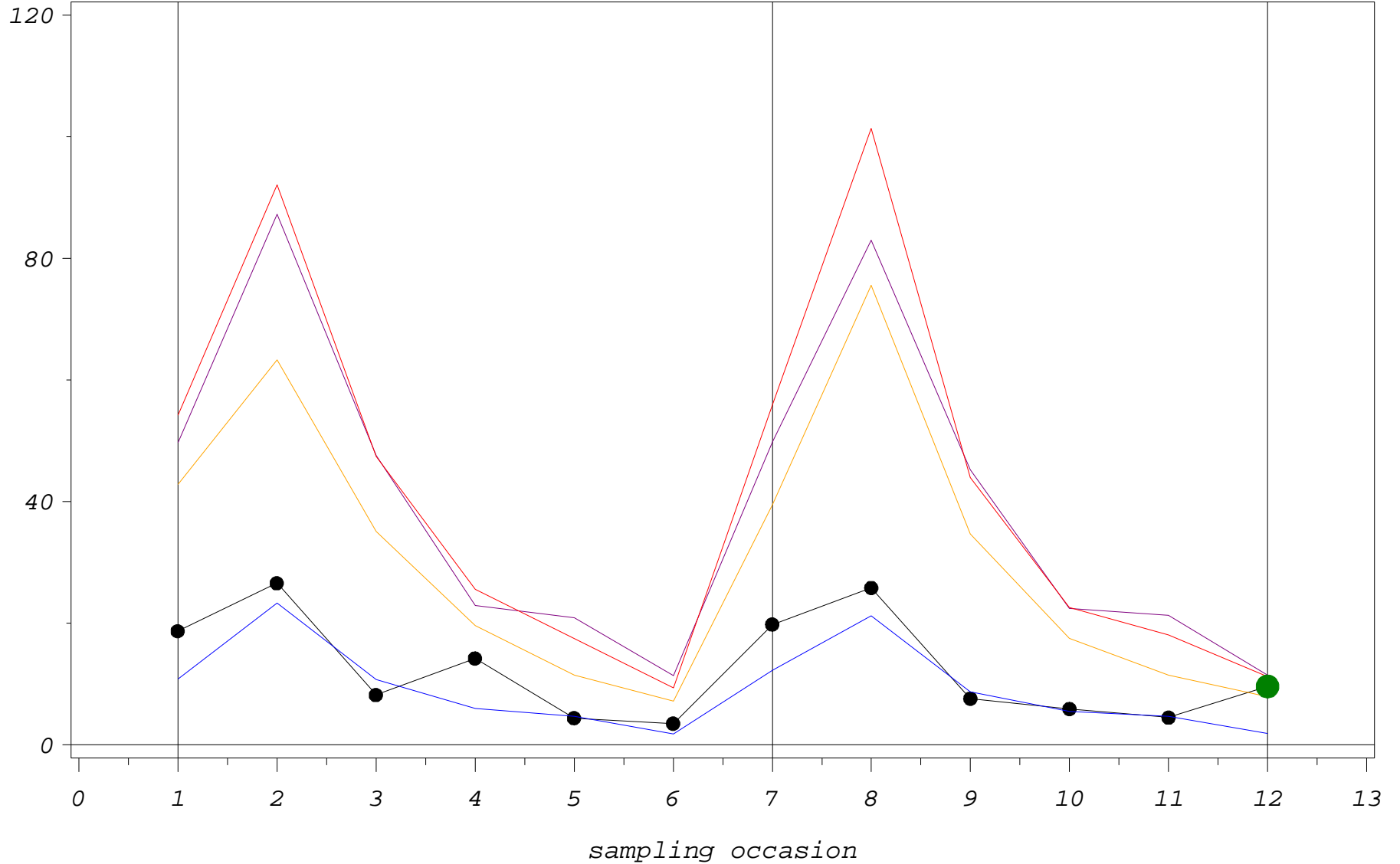
CODE=P03204



Study 1: cortisol single profiles with outlier fences

CODE=P03205

cortisol (nmol/l)

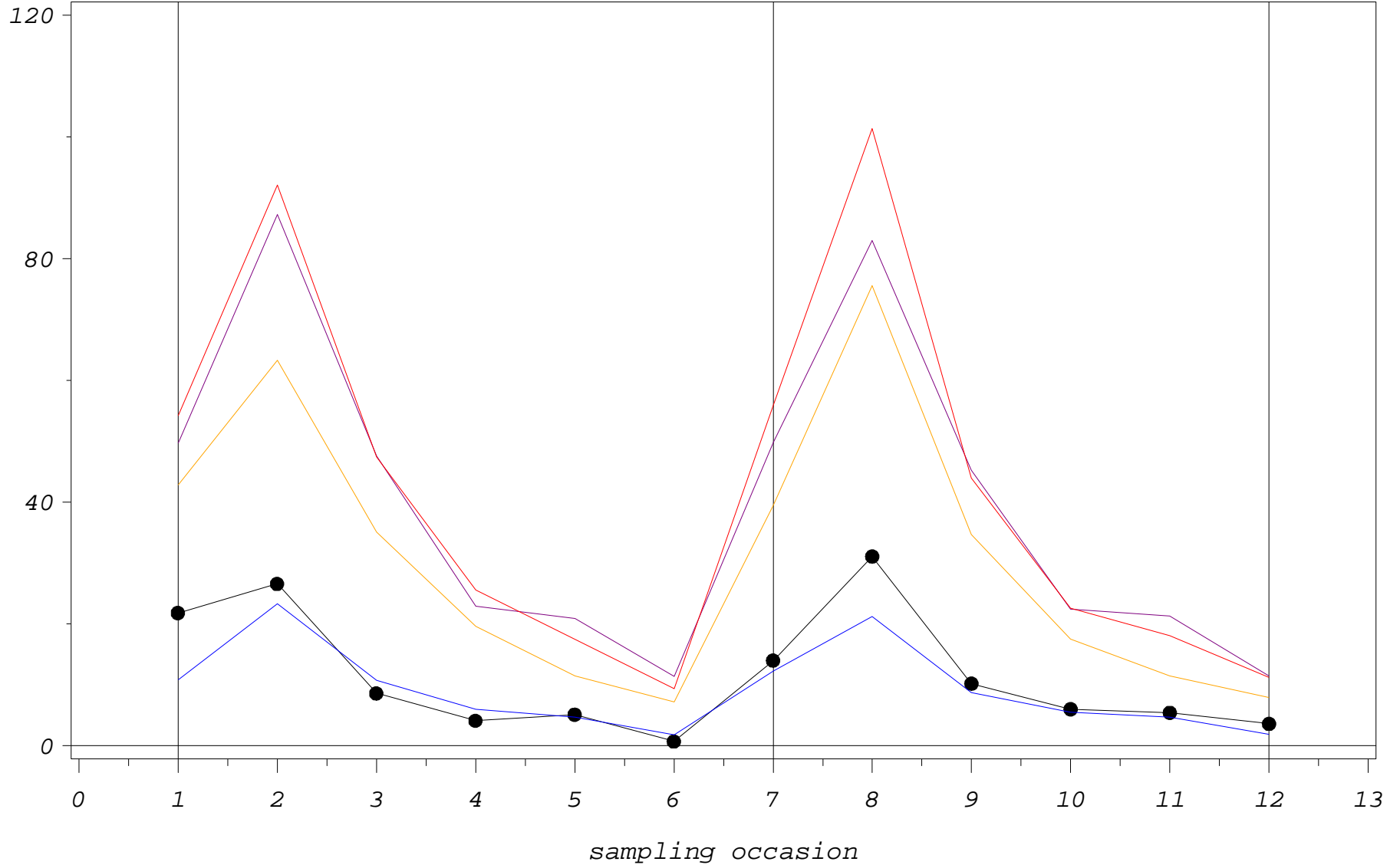


PLOT ●—●—● Cortisol — Median — $MW + (4 \cdot SD)$
 — $Q3 + (3 \cdot IQR)$ — $Q2 + (4 \cdot (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 1: cortisol single profiles with outlier fences

CODE=P03206

cortisol (nmol/l)



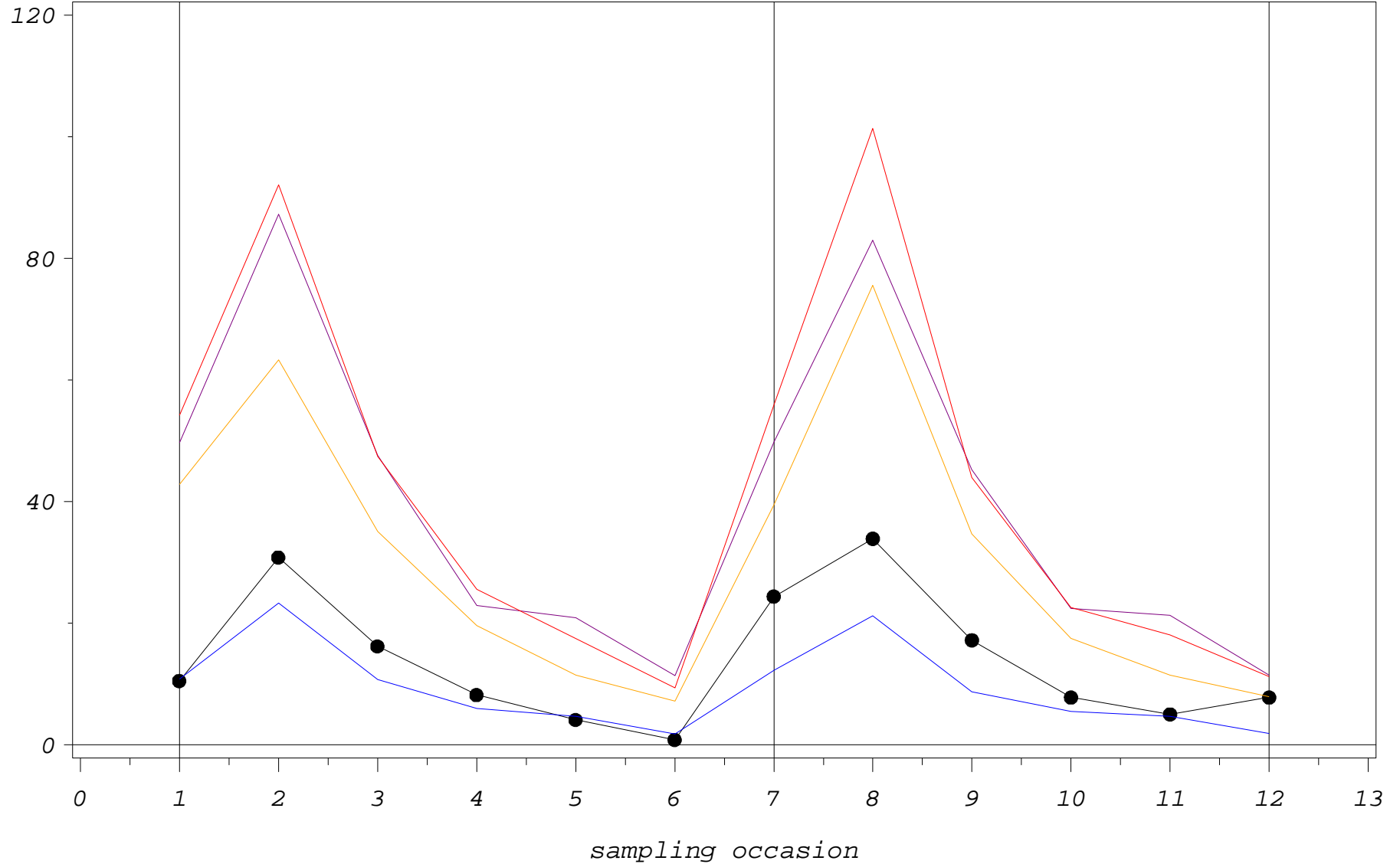
PLOT

●—●—●	Cortisol	—	Median	—	$MW+(4*SD)$
—	$Q3+(3*IQR)$	—	$Q2+(4*(Q3-Q2))$	●—●—●	cortisol-outlier

Study 1: cortisol single profiles with outlier fences

CODE=P03207

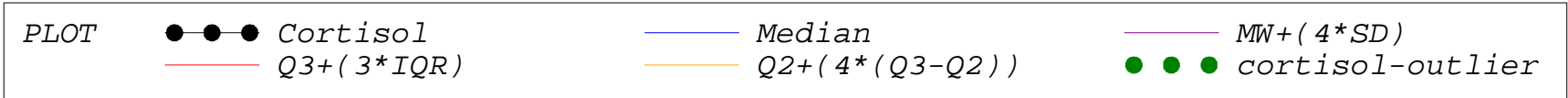
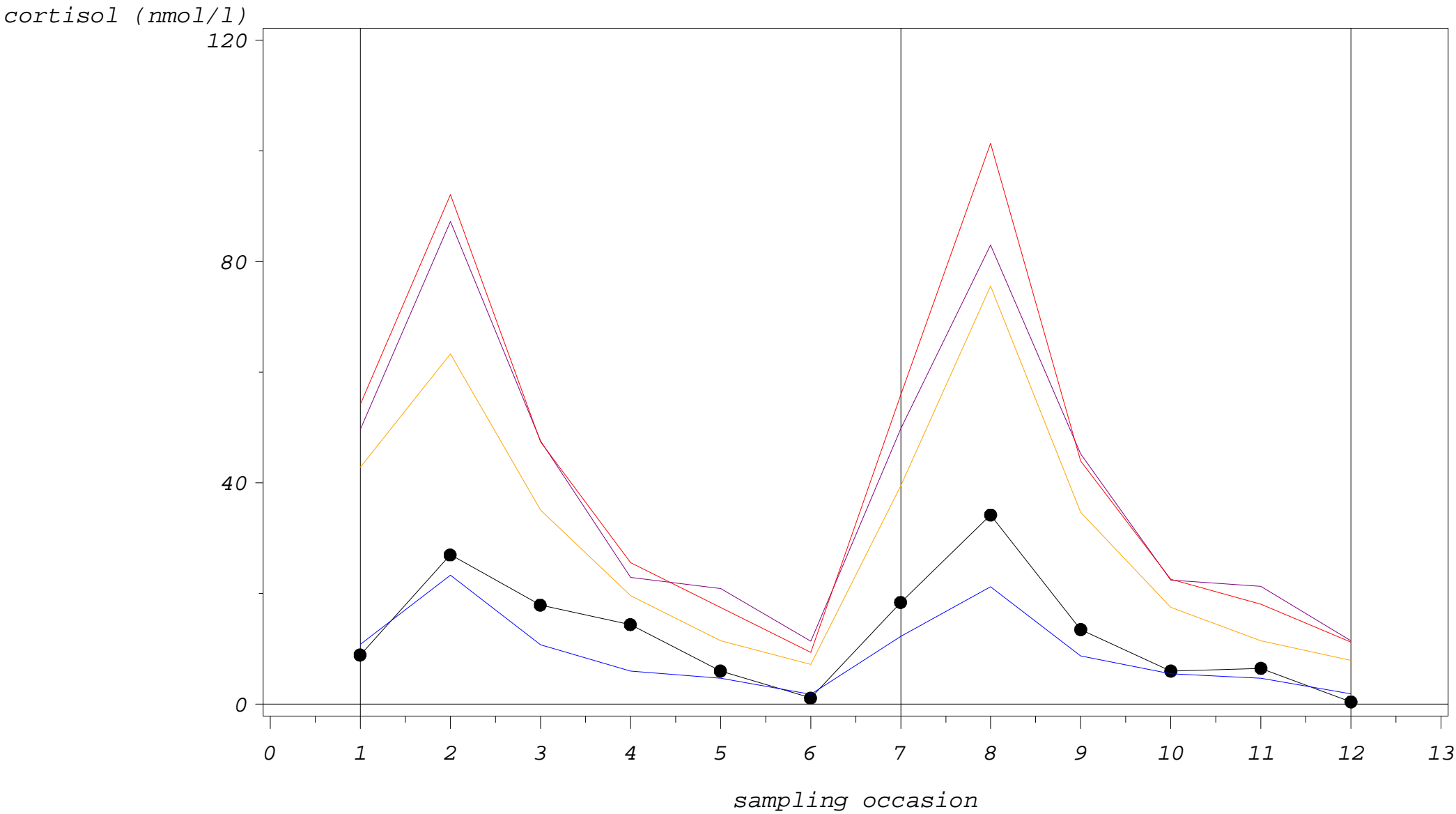
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 1: cortisol single profiles with outlier fences

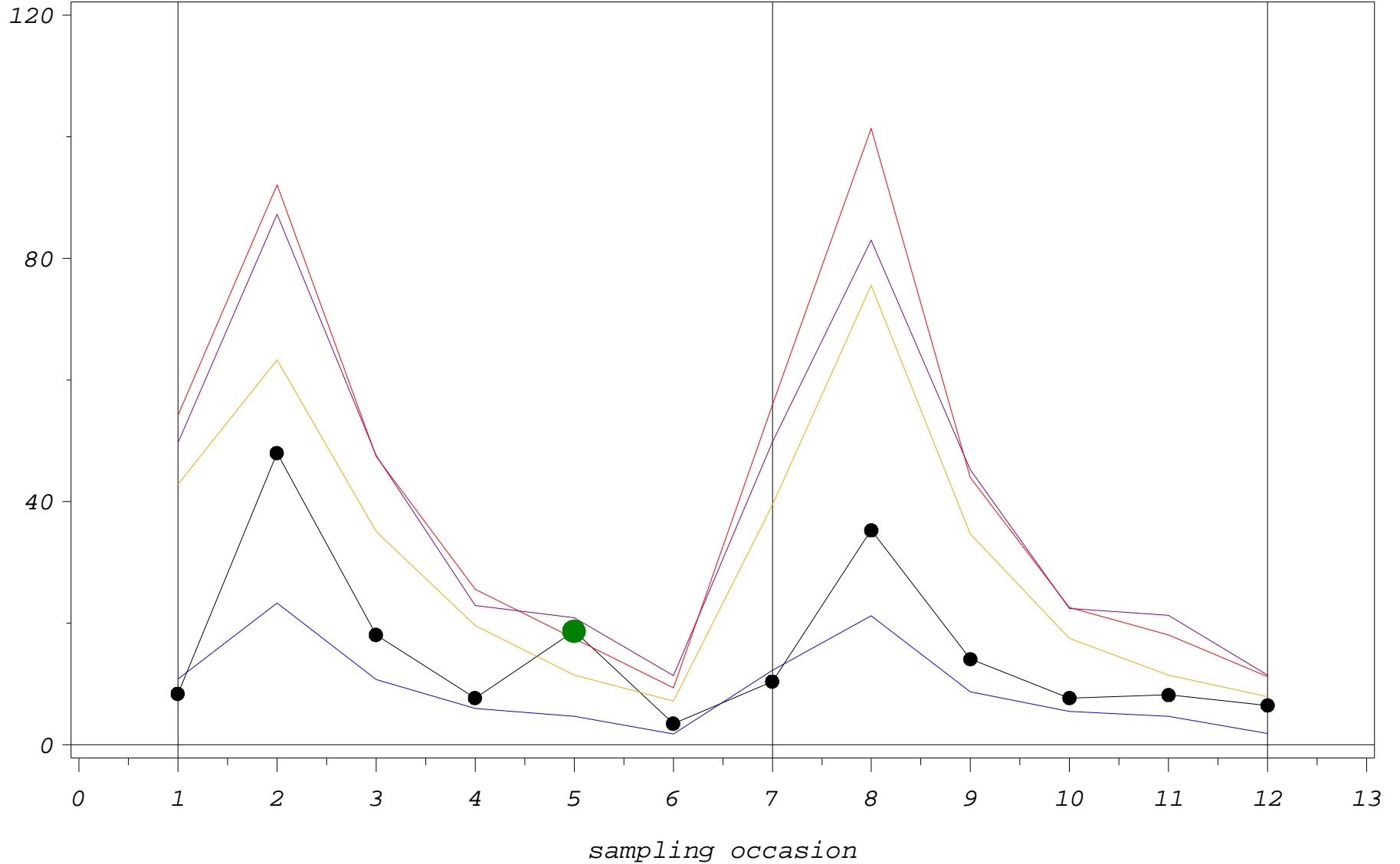
CODE=P03208



Study 1: cortisol single profiles with outlier fences

CODE=P03209

cortisol (nmol/l)



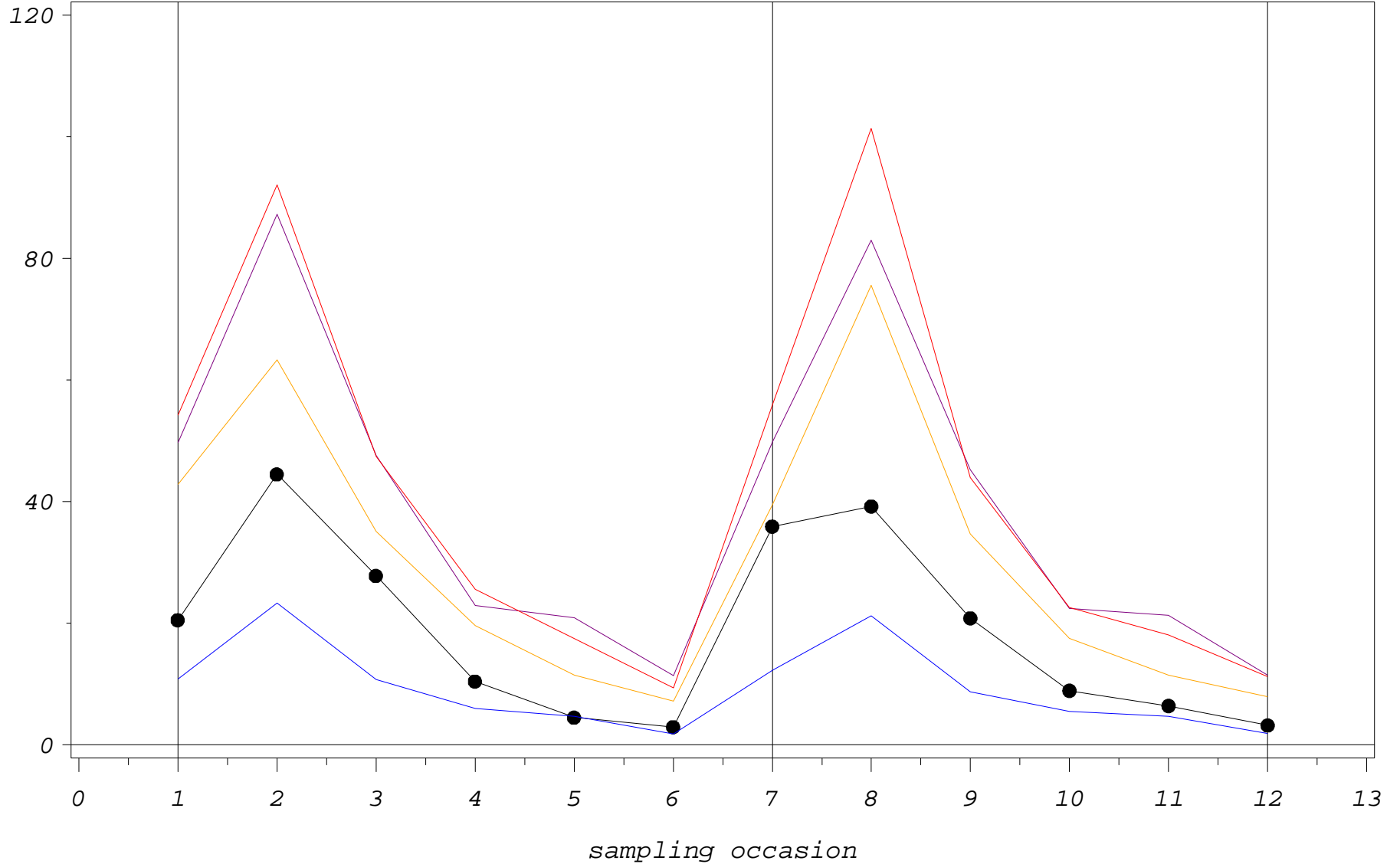
PLOT

●—●—●	Cortisol	—	Median	—	$MW + (4 * SD)$
—	$Q3 + (3 * IQR)$	—	$Q2 + (4 * (Q3 - Q2))$	●—●—●	cortisol-outlier

Study 1: cortisol single profiles with outlier fences

CODE=P03210

cortisol (nmol/l)



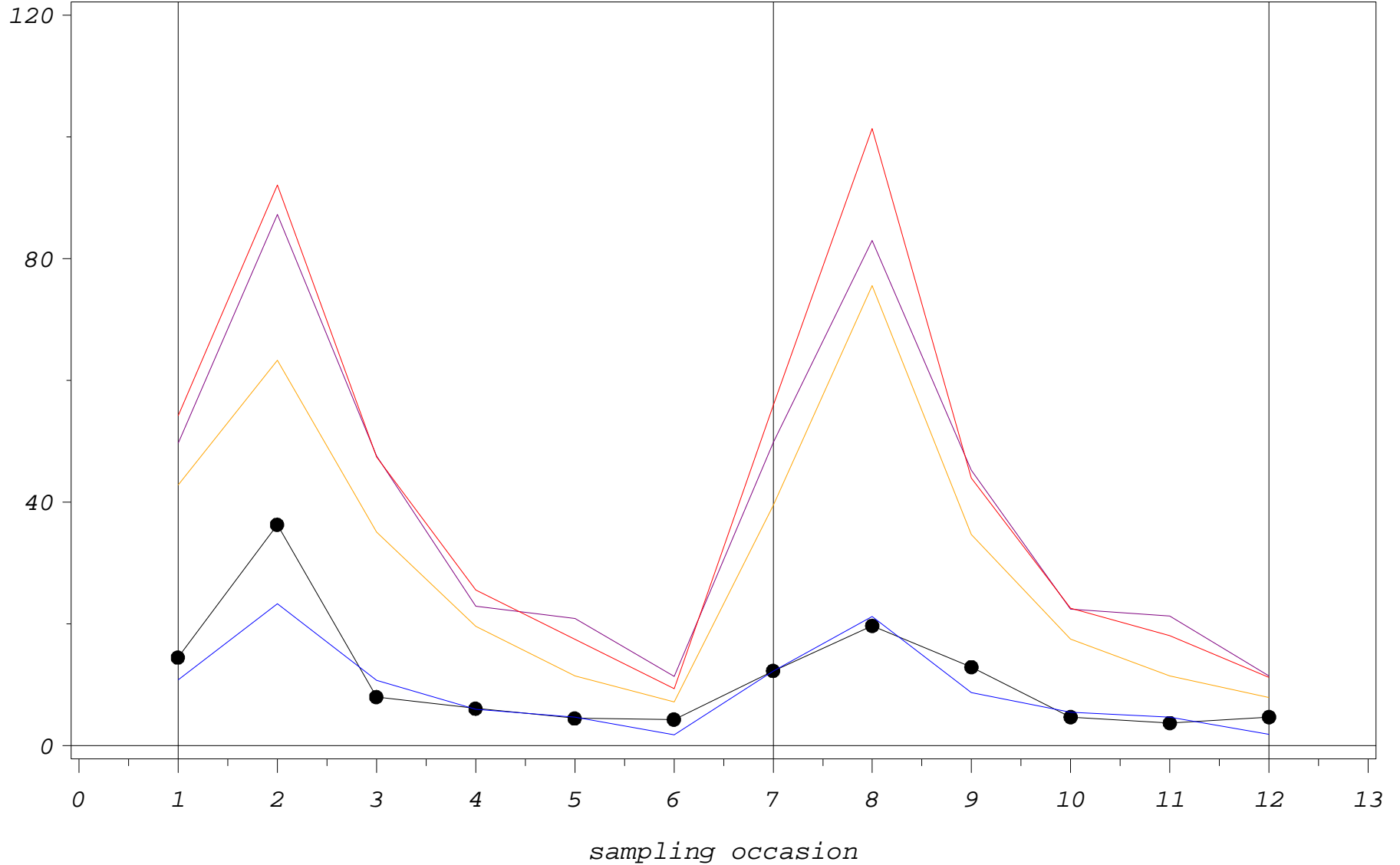
PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 1: cortisol single profiles with outlier fences

CODE=P03211

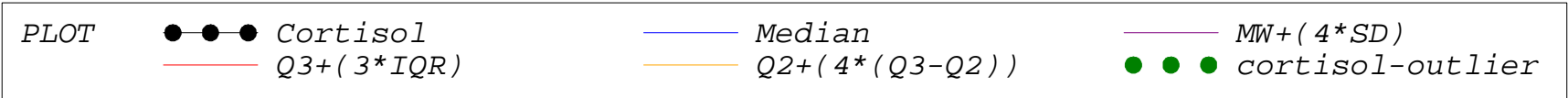
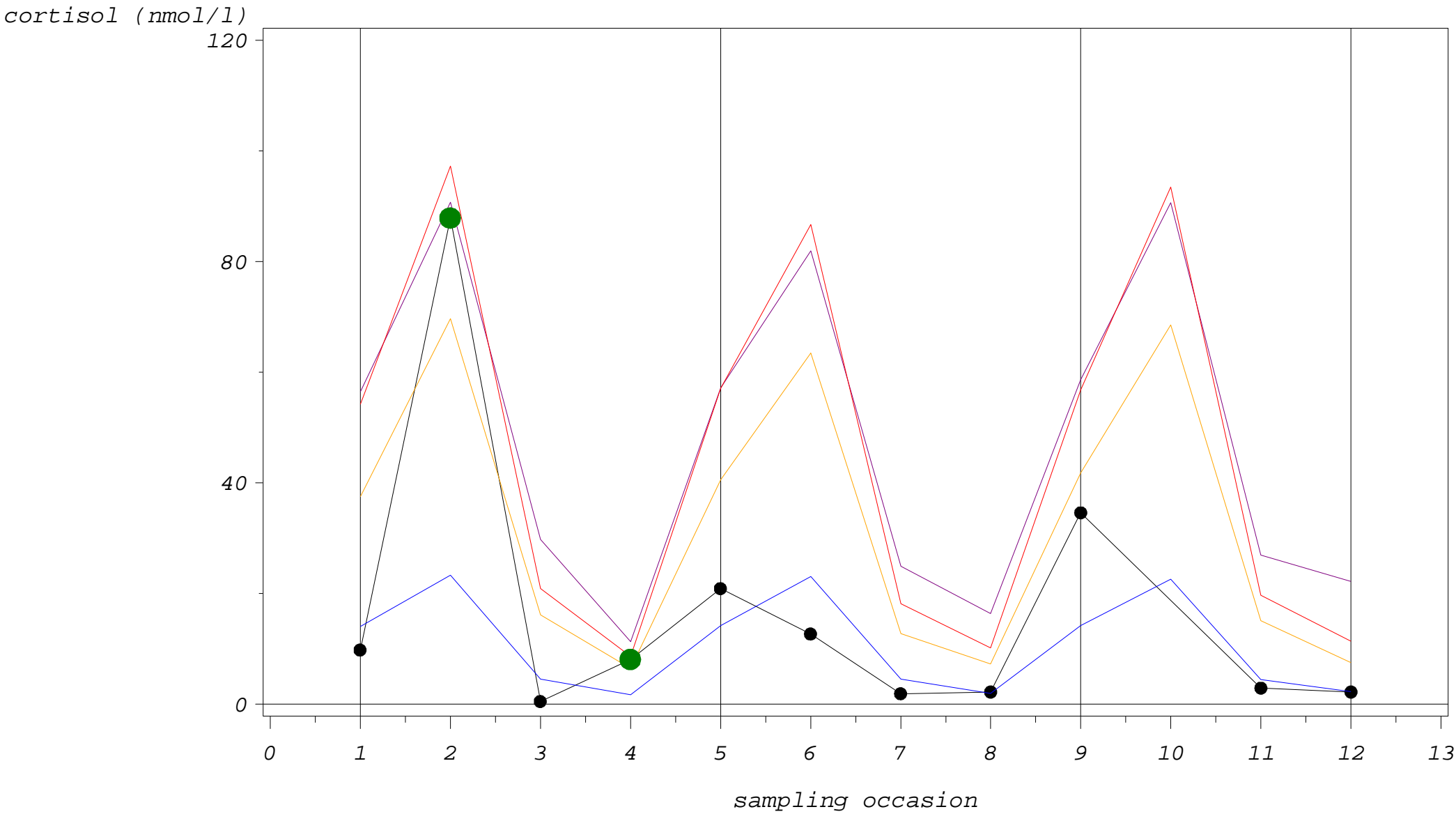
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ●●● cortisol-outlier

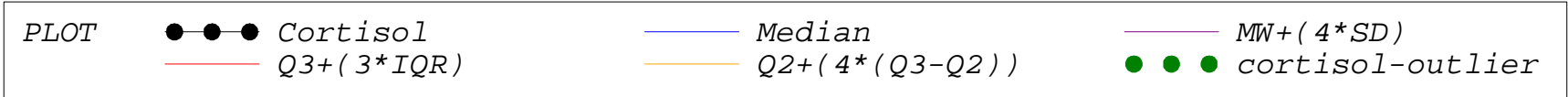
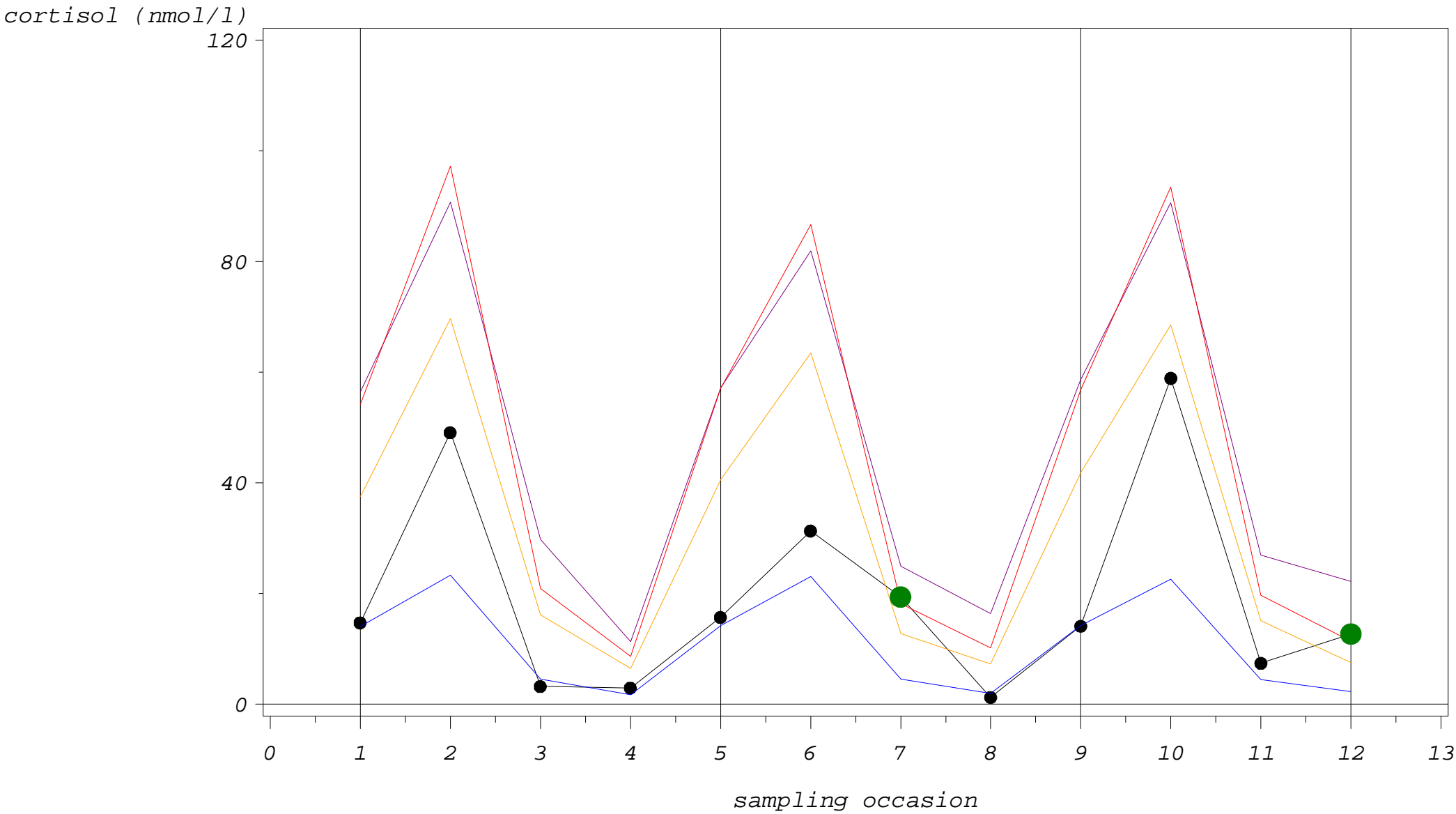
Study 2: cortisol single profiles with outlier fences

CODE=H00531



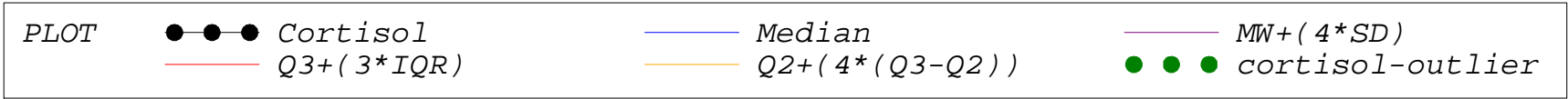
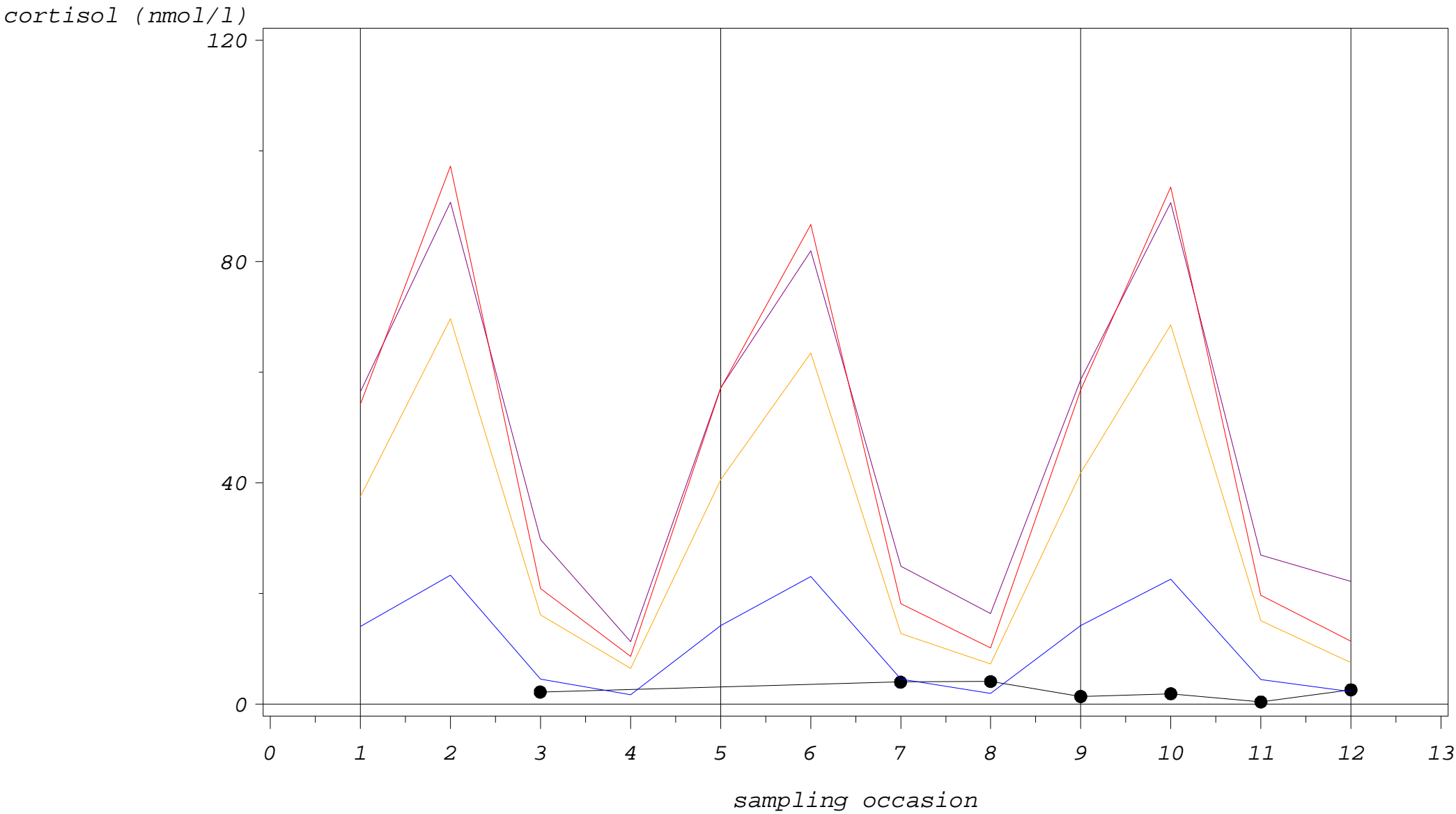
Study 2: cortisol single profiles with outlier fences

CODE=H00532



Study 2: cortisol single profiles with outlier fences

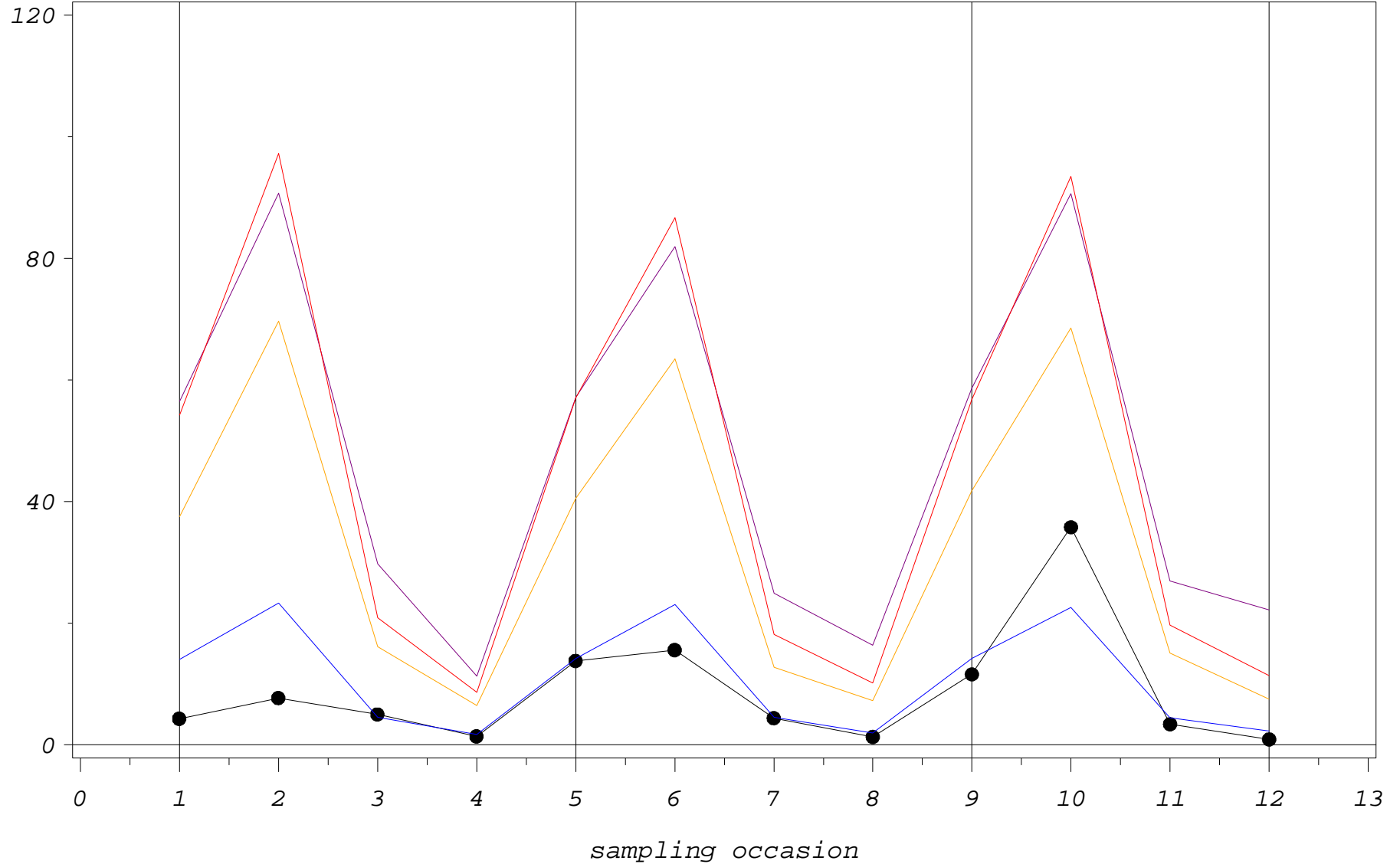
CODE=H00533



Study 2: cortisol single profiles with outlier fences

CODE=H00534

cortisol (nmol/l)

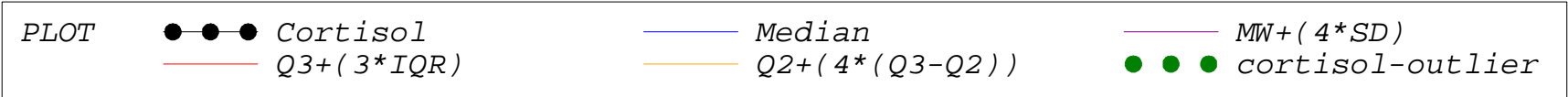
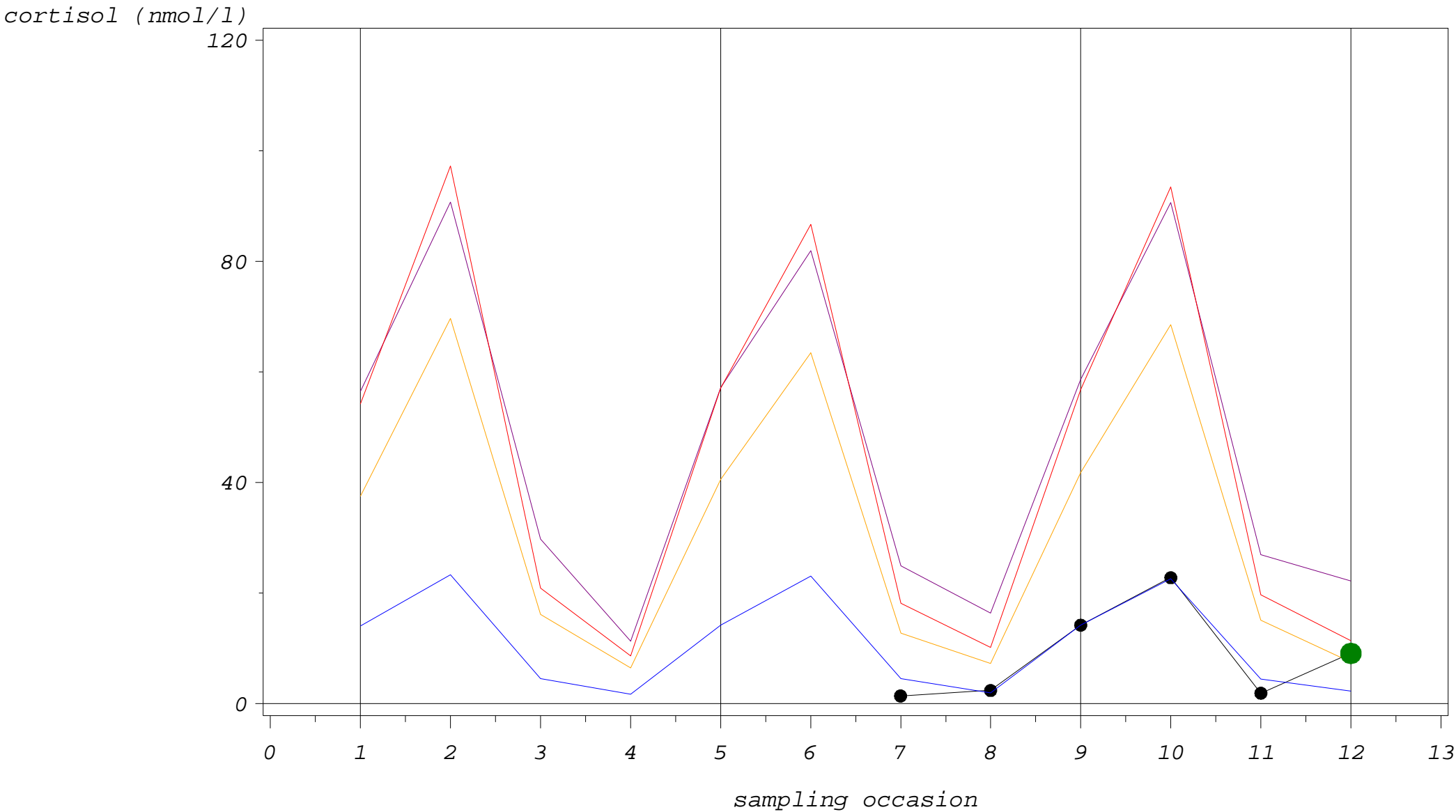


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

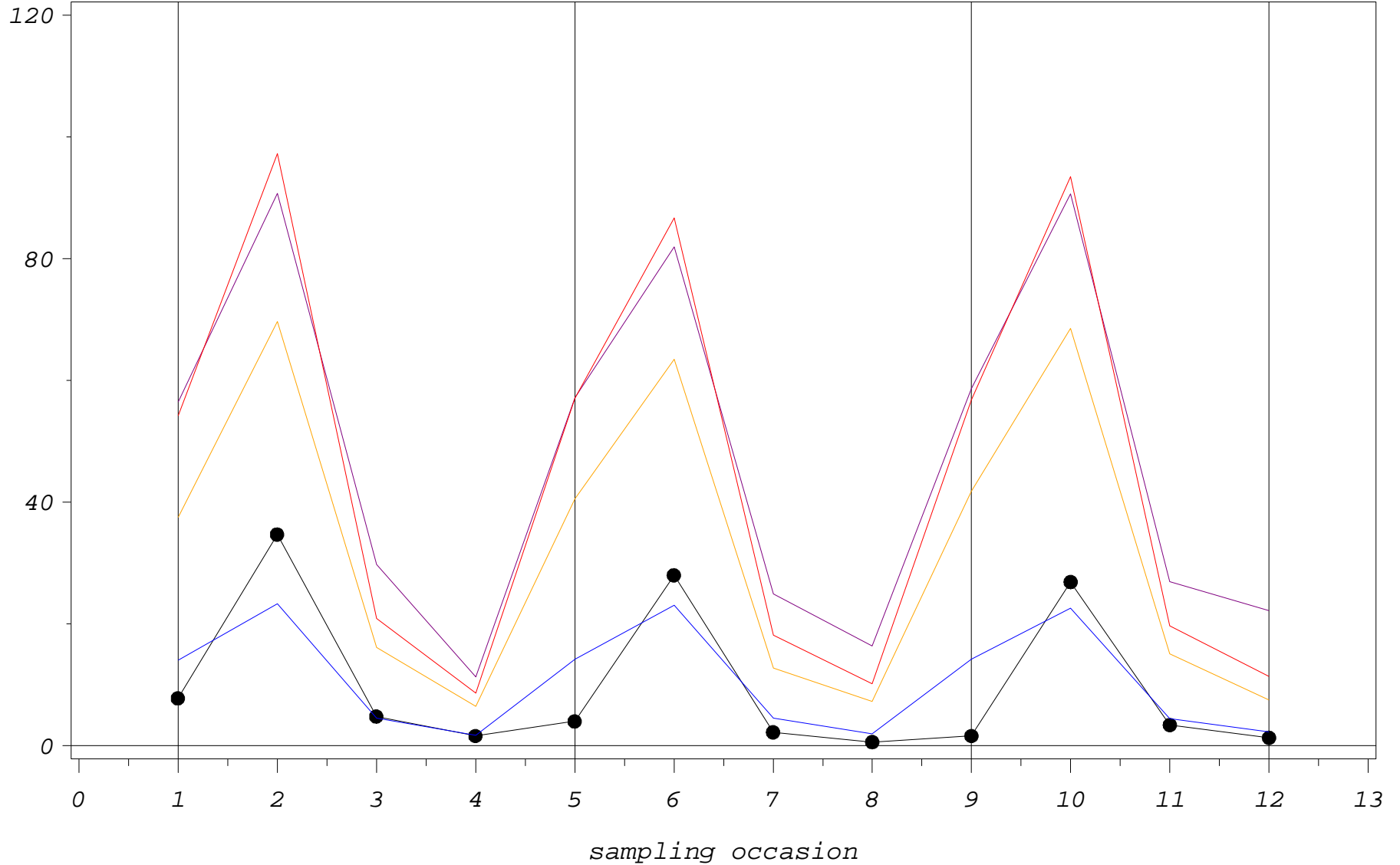
CODE=H00535



Study 2: cortisol single profiles with outlier fences

CODE=H00536

cortisol (nmol/l)

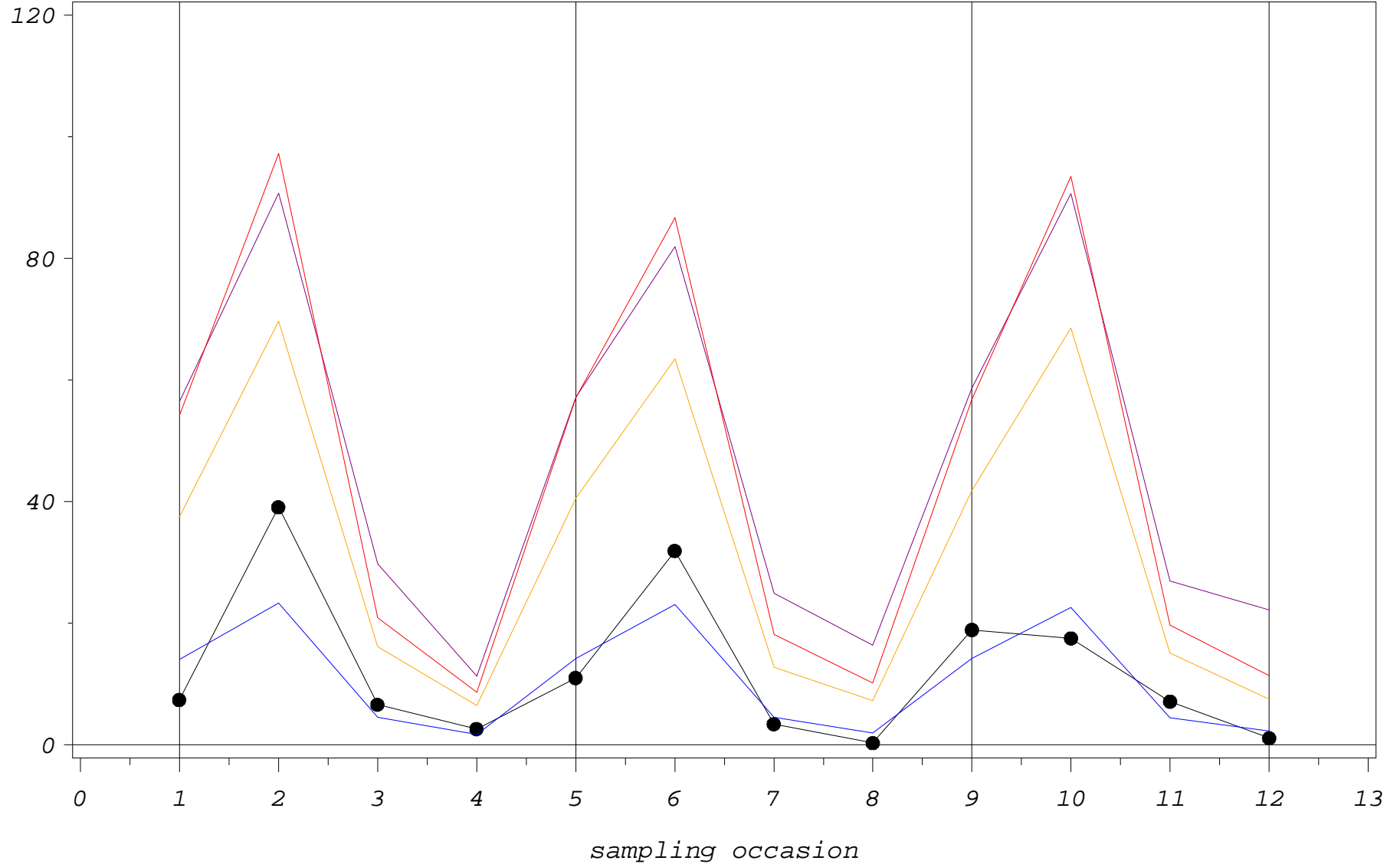


PLOT ●—●—● Cortisol — Median — $MW + (4 * SD)$
 — $Q3 + (3 * IQR)$ — $Q2 + (4 * (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H00537

cortisol (nmol/l)

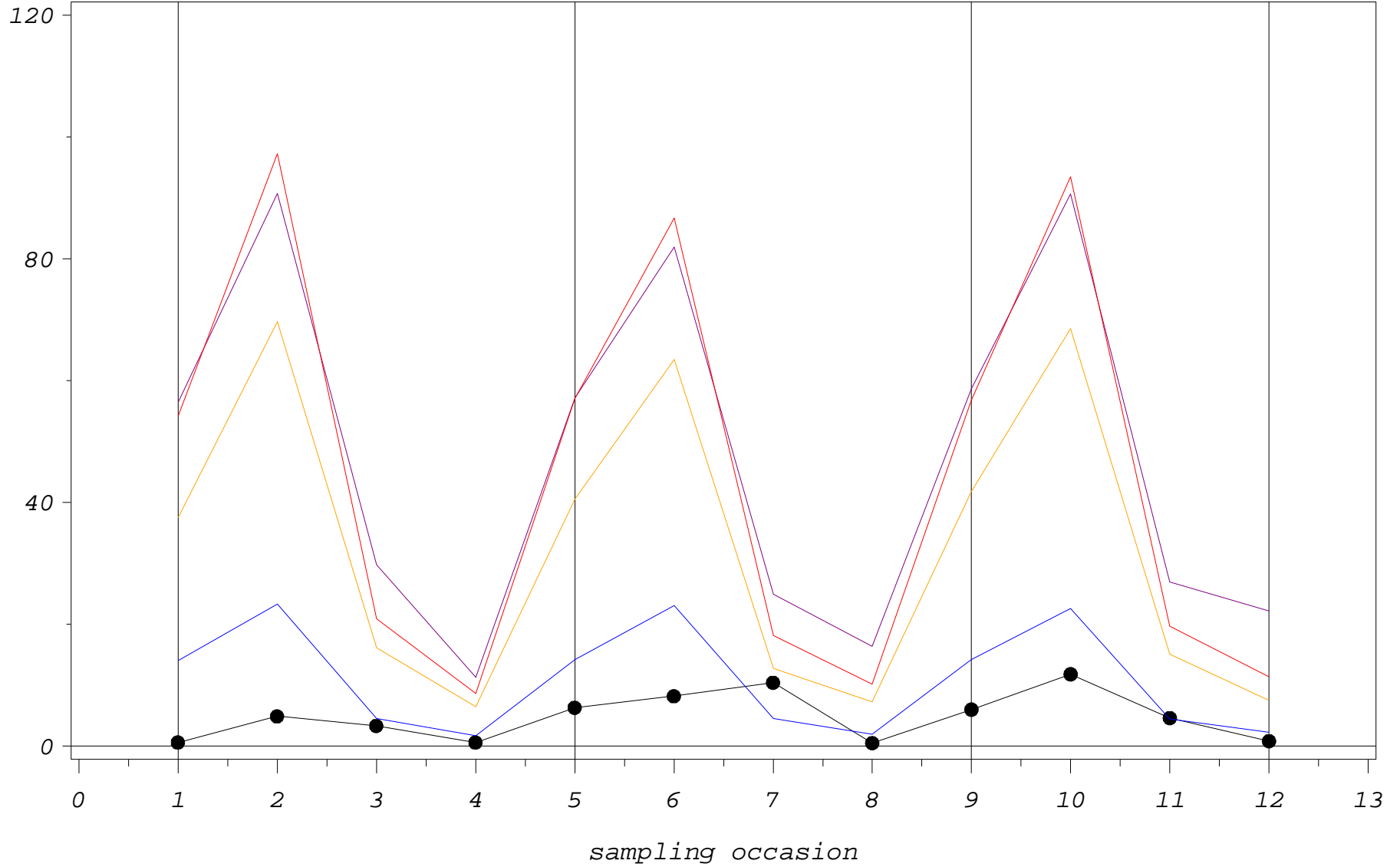


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H00539

cortisol (nmol/l)

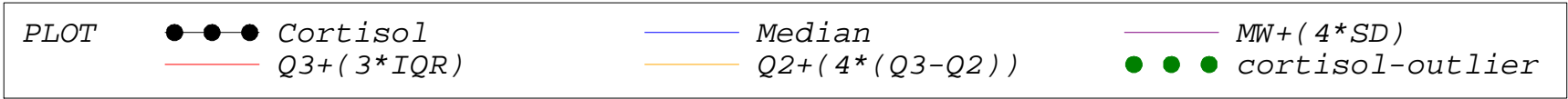
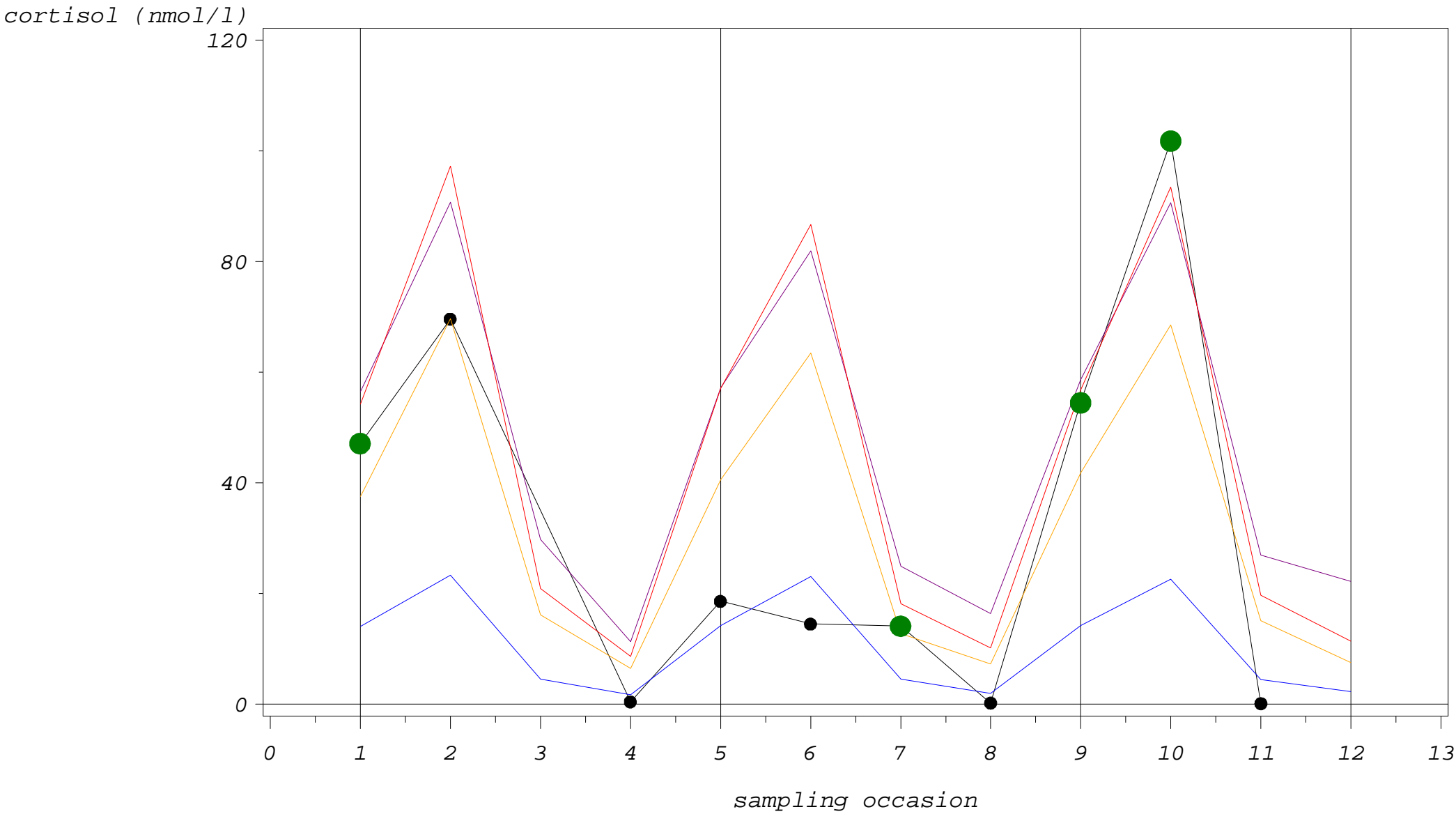


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

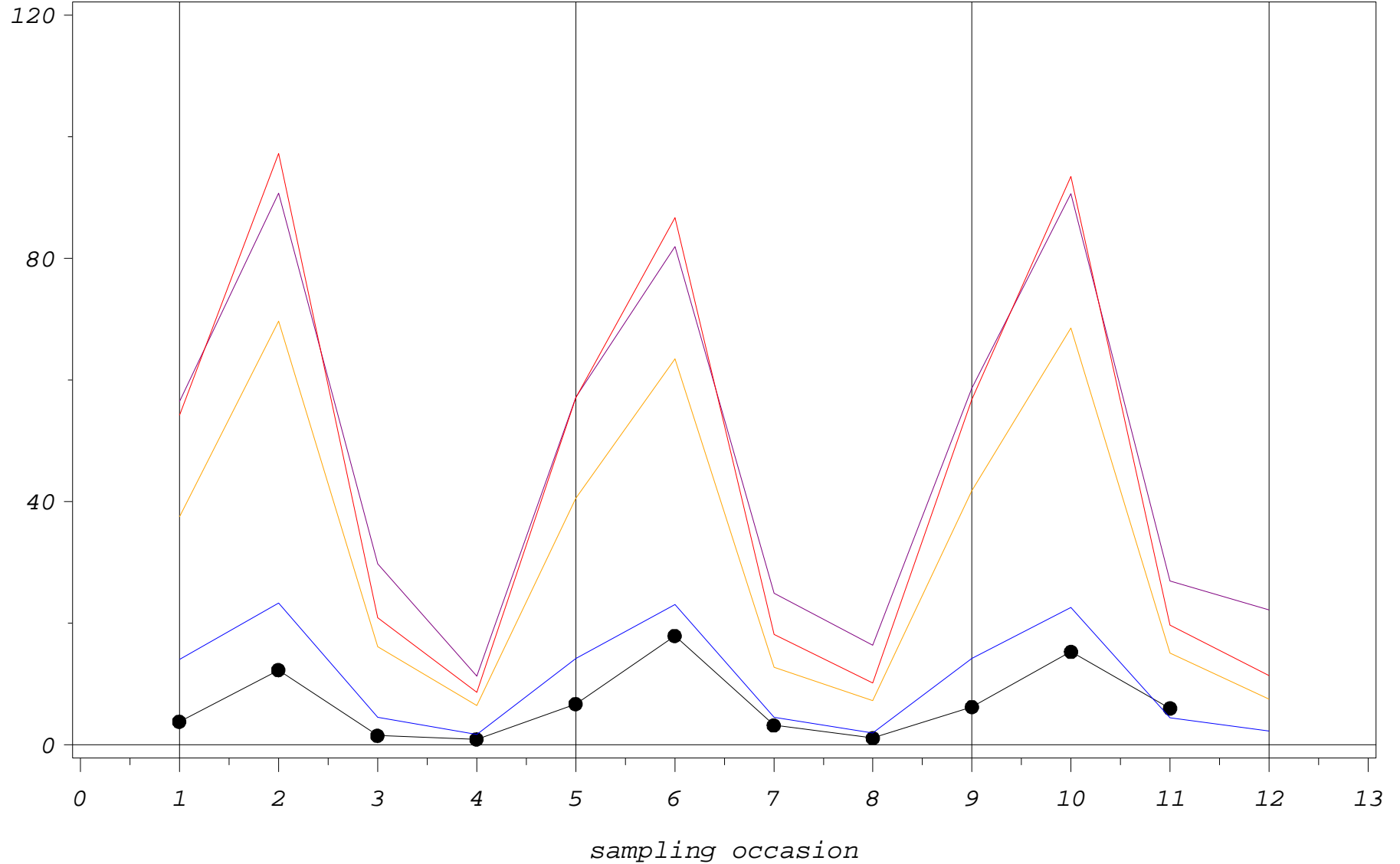
CODE=H00541



Study 2: cortisol single profiles with outlier fences

CODE=H00542

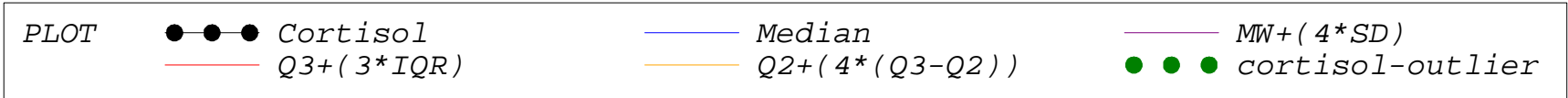
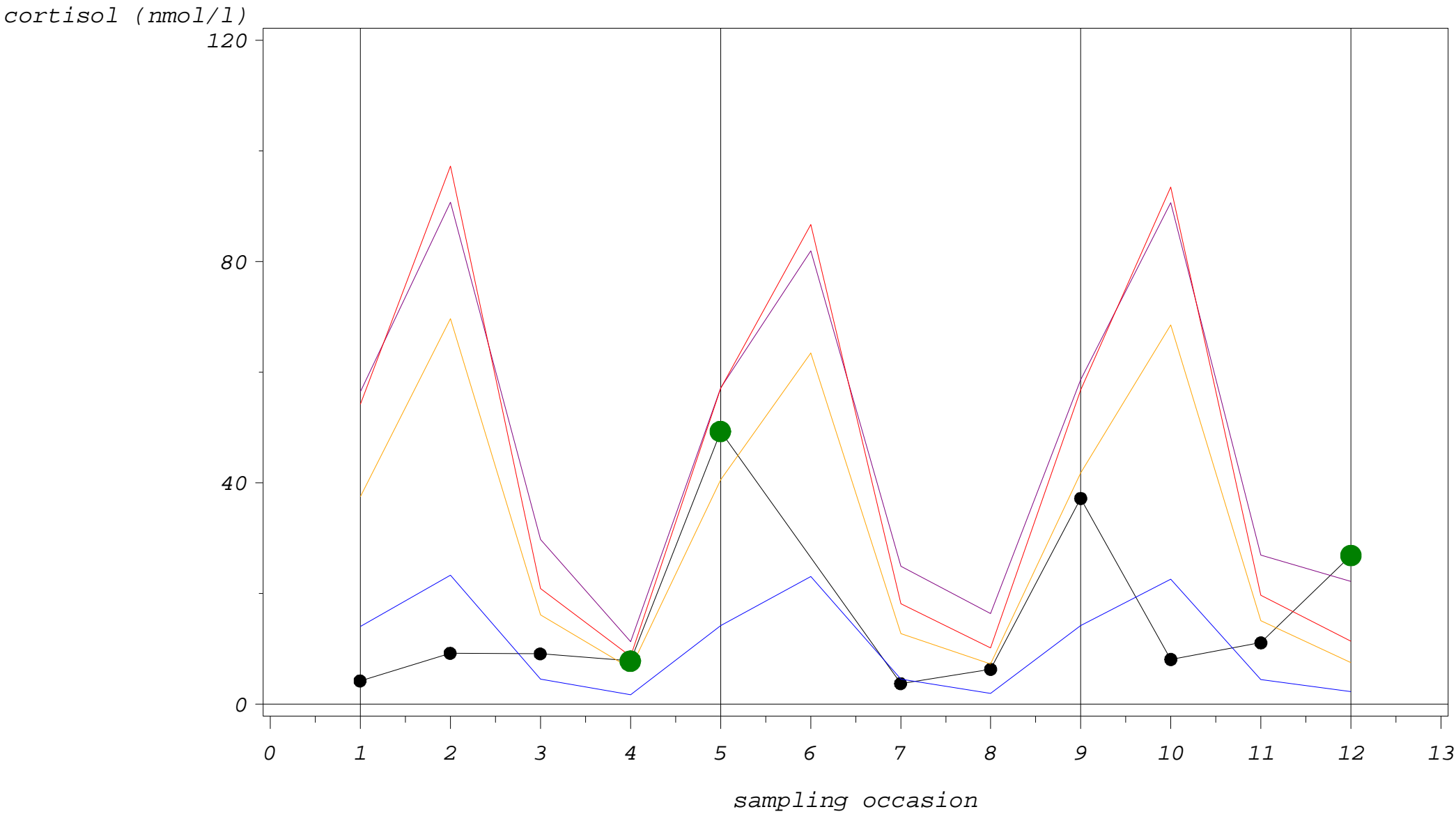
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 \times SD)$
 — $Q3 + (3 \times IQR)$ — $Q2 + (4 \times (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

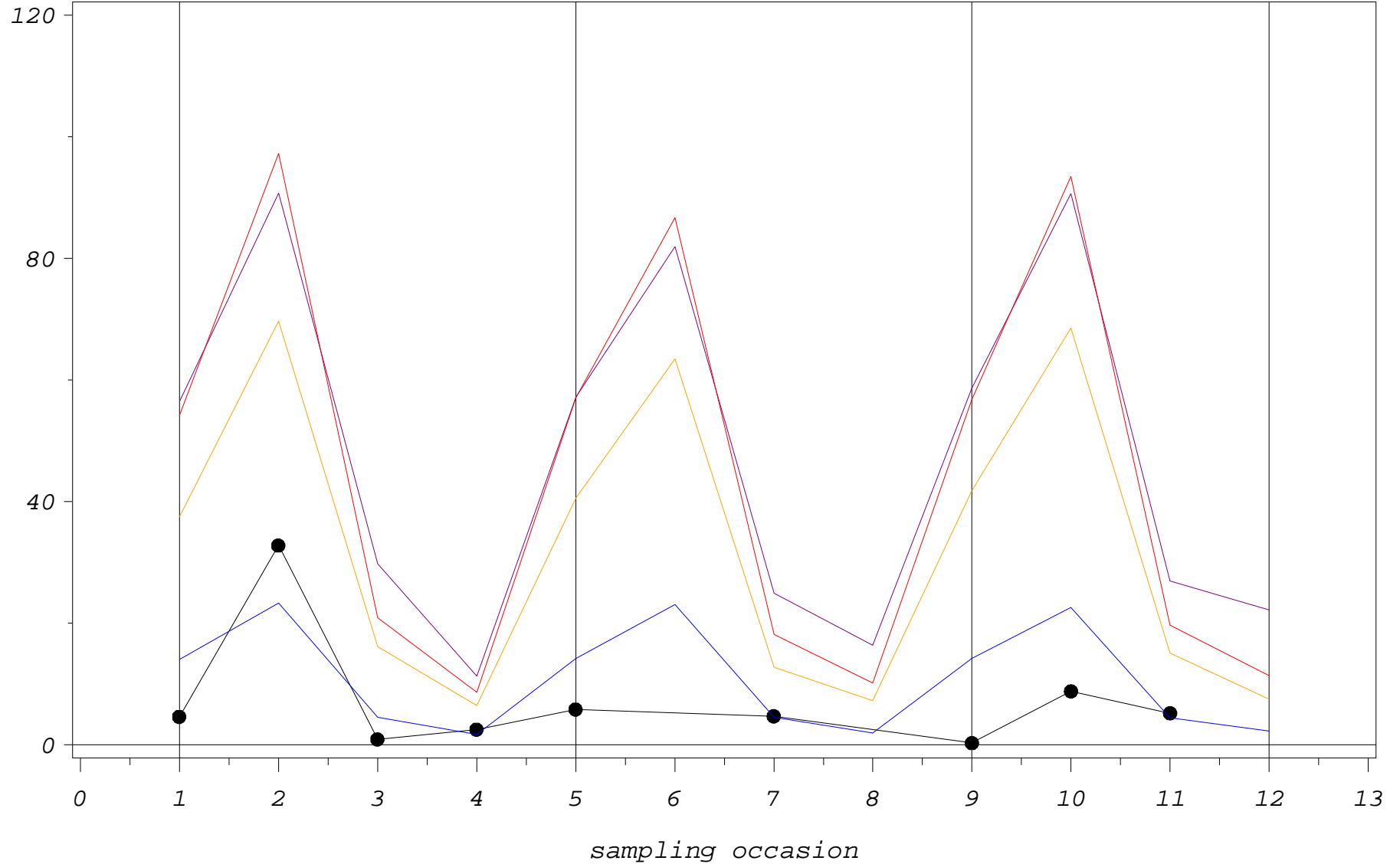
CODE=H00544



Study 2: cortisol single profiles with outlier fences

CODE=H00546

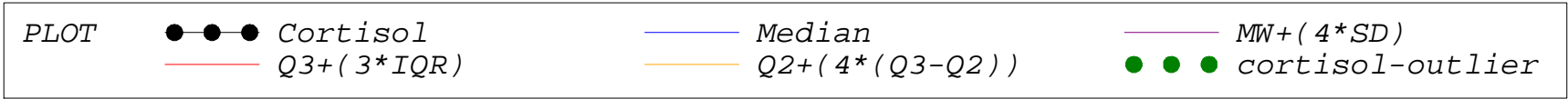
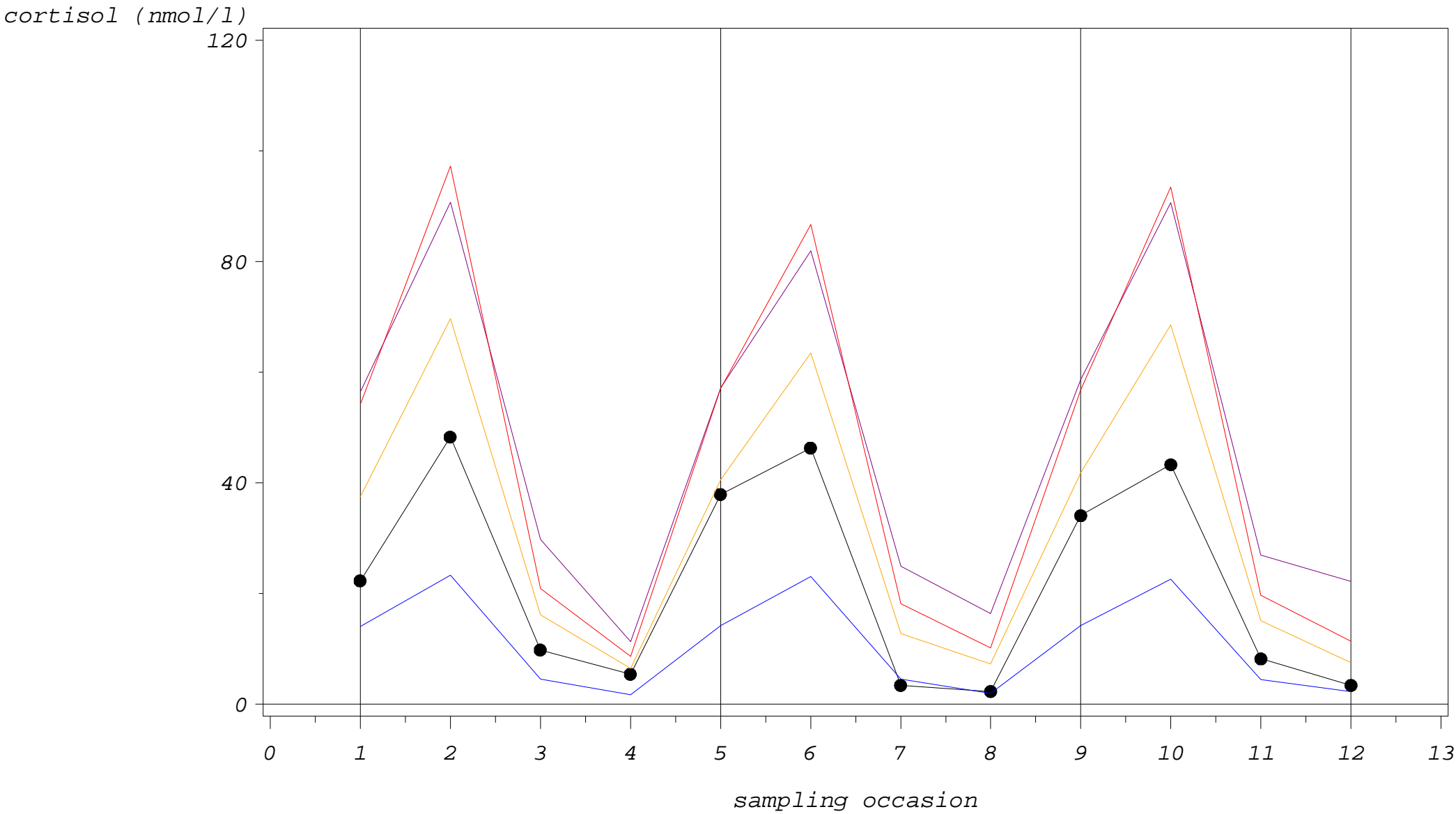
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

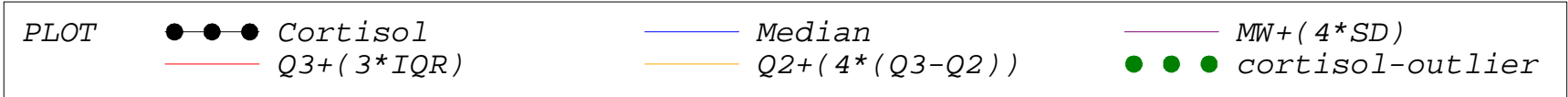
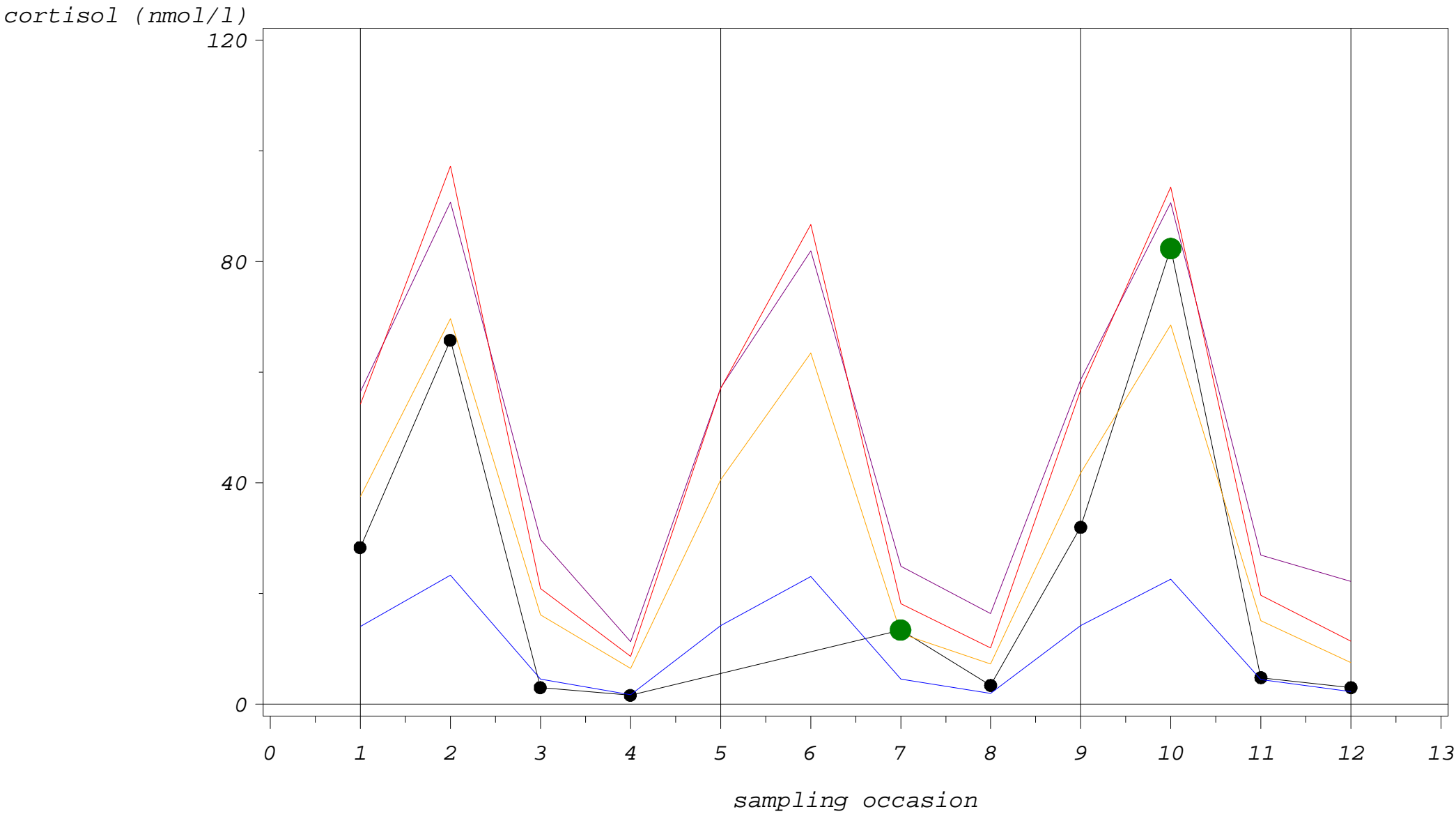
Study 2: cortisol single profiles with outlier fences

CODE=H00547



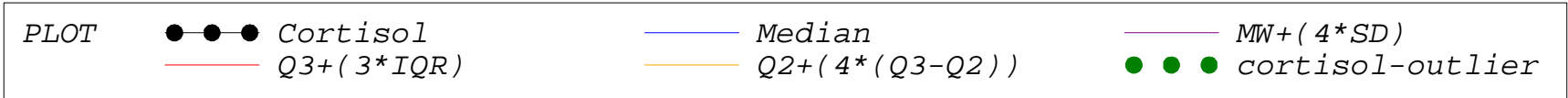
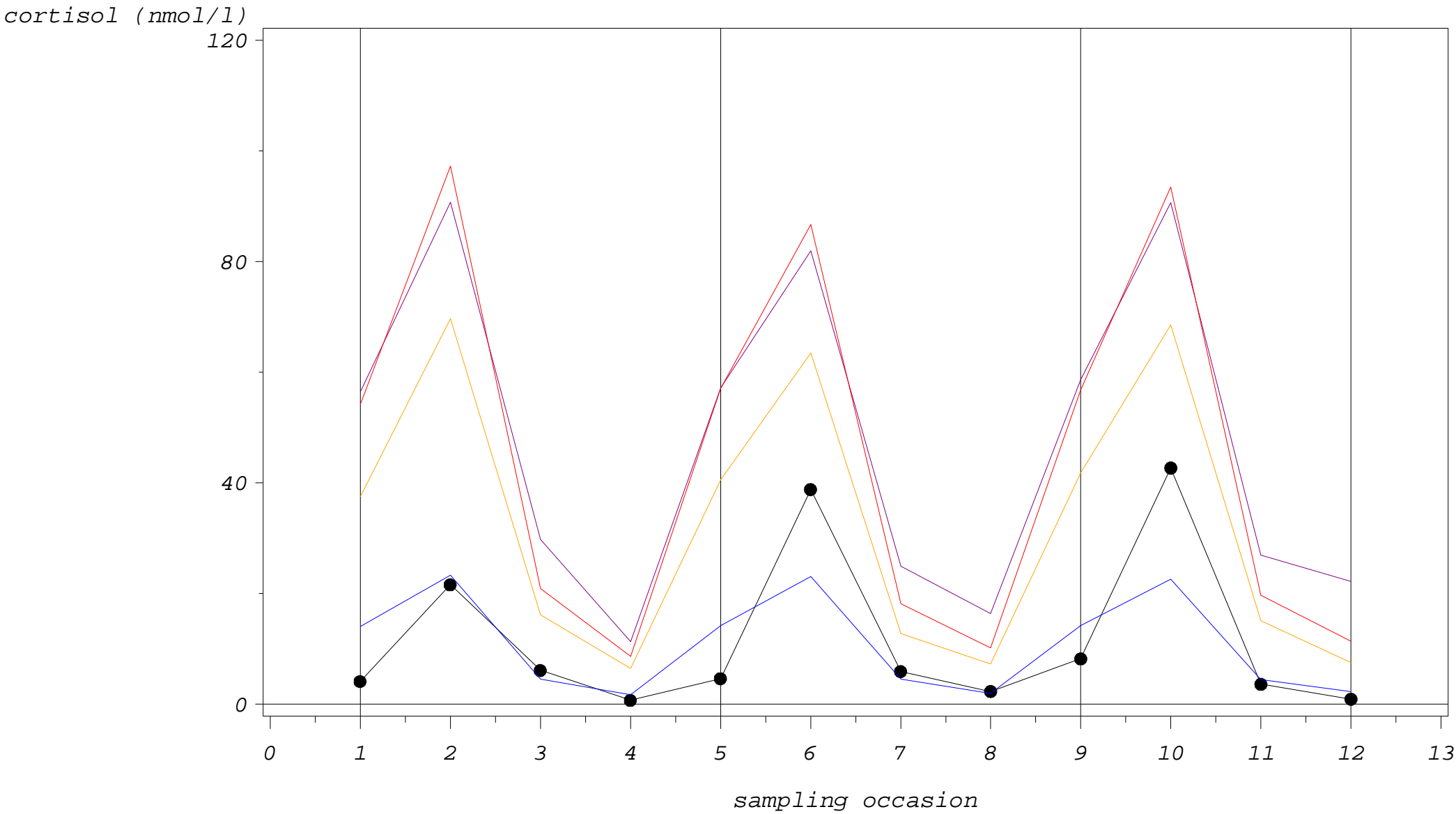
Study 2: cortisol single profiles with outlier fences

CODE=H00548



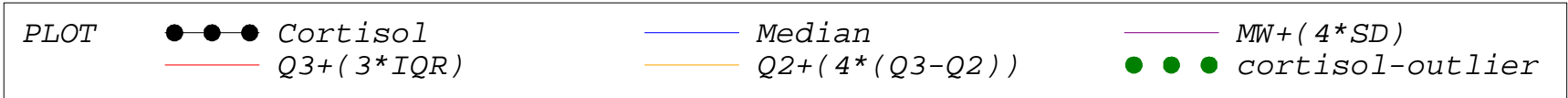
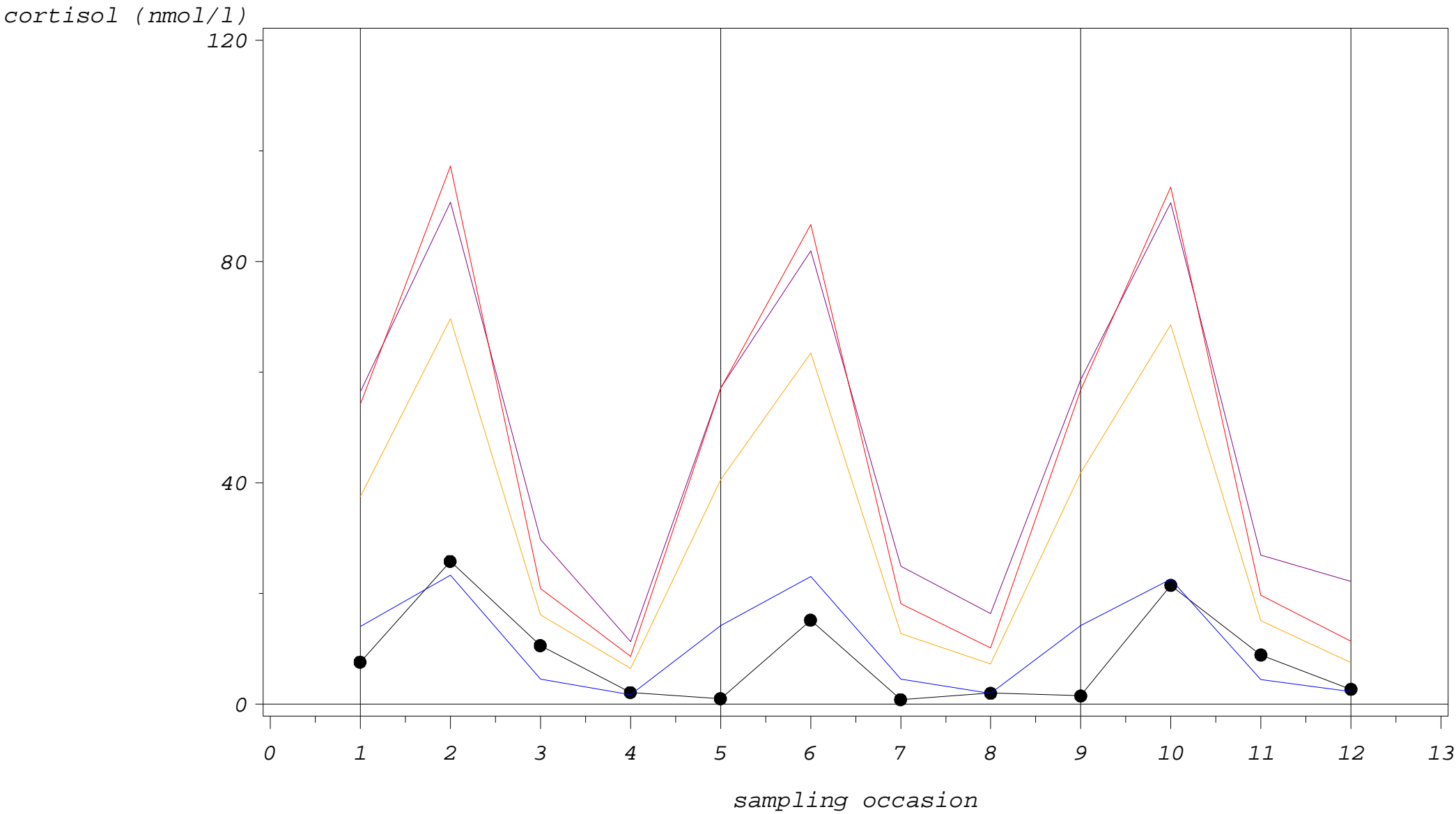
Study 2: cortisol single profiles with outlier fences

CODE=H00549



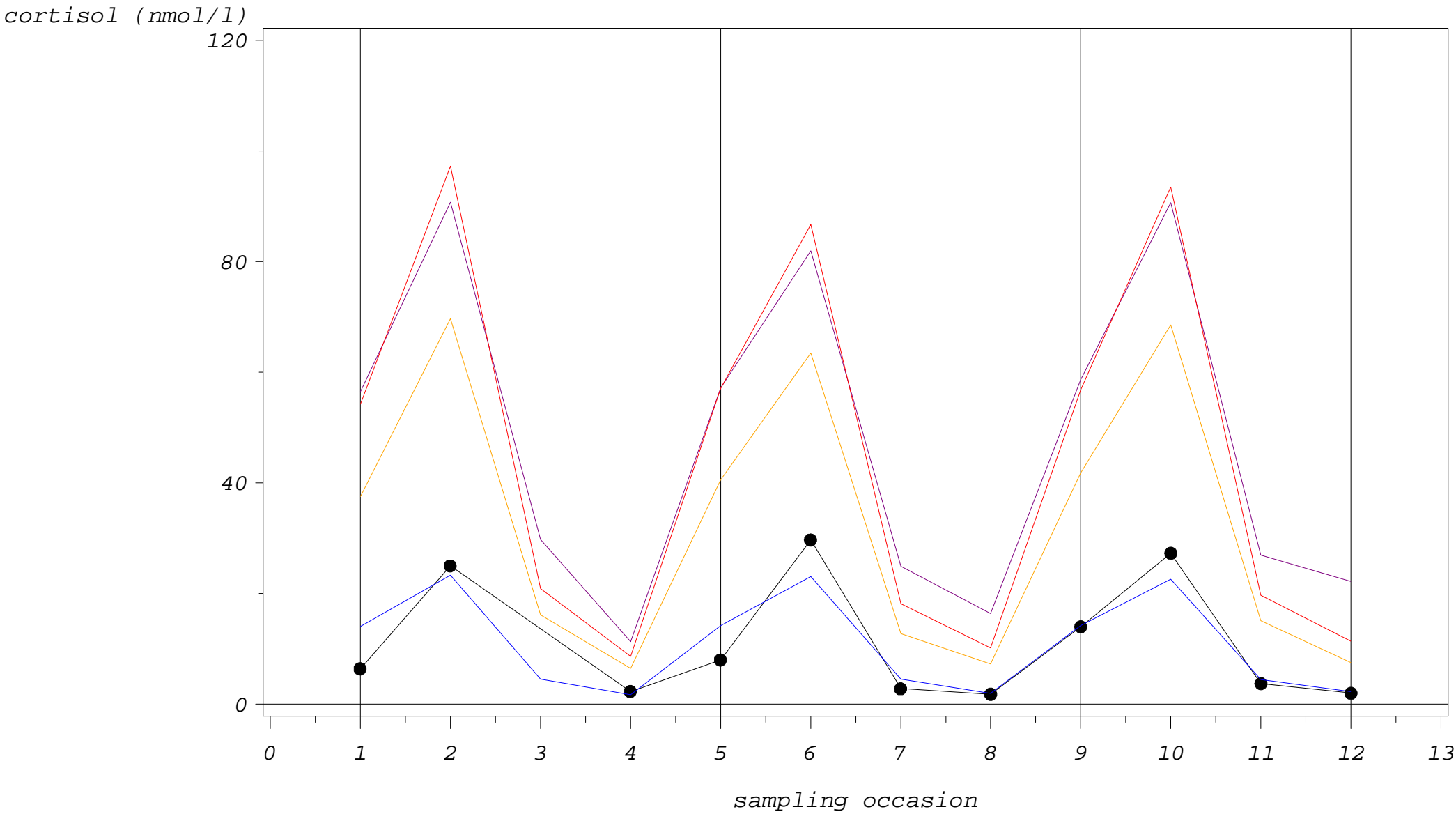
Study 2: cortisol single profiles with outlier fences

CODE=H00550



Study 2: cortisol single profiles with outlier fences

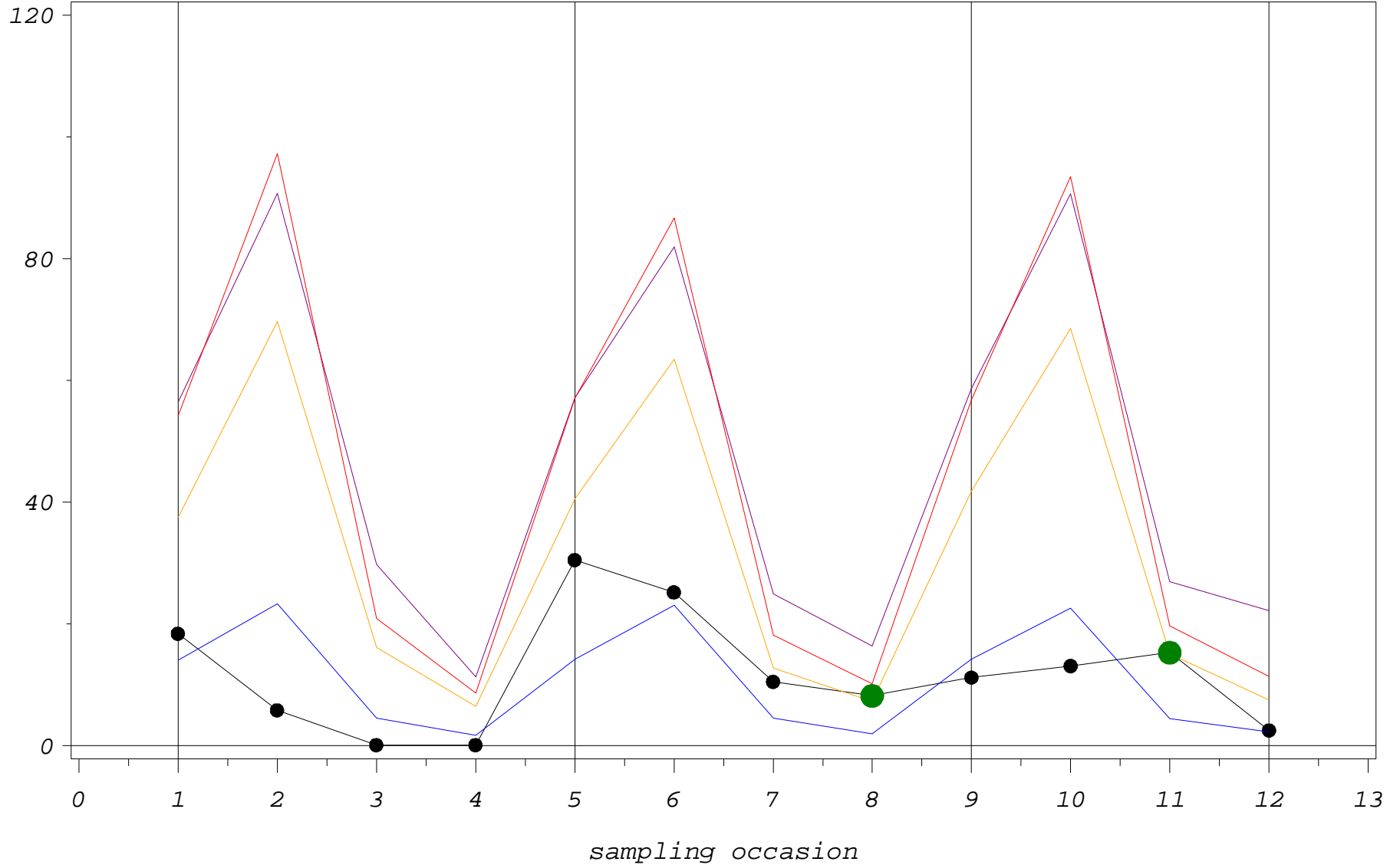
CODE=H00551



Study 2: cortisol single profiles with outlier fences

CODE=H00552

cortisol (nmol/l)



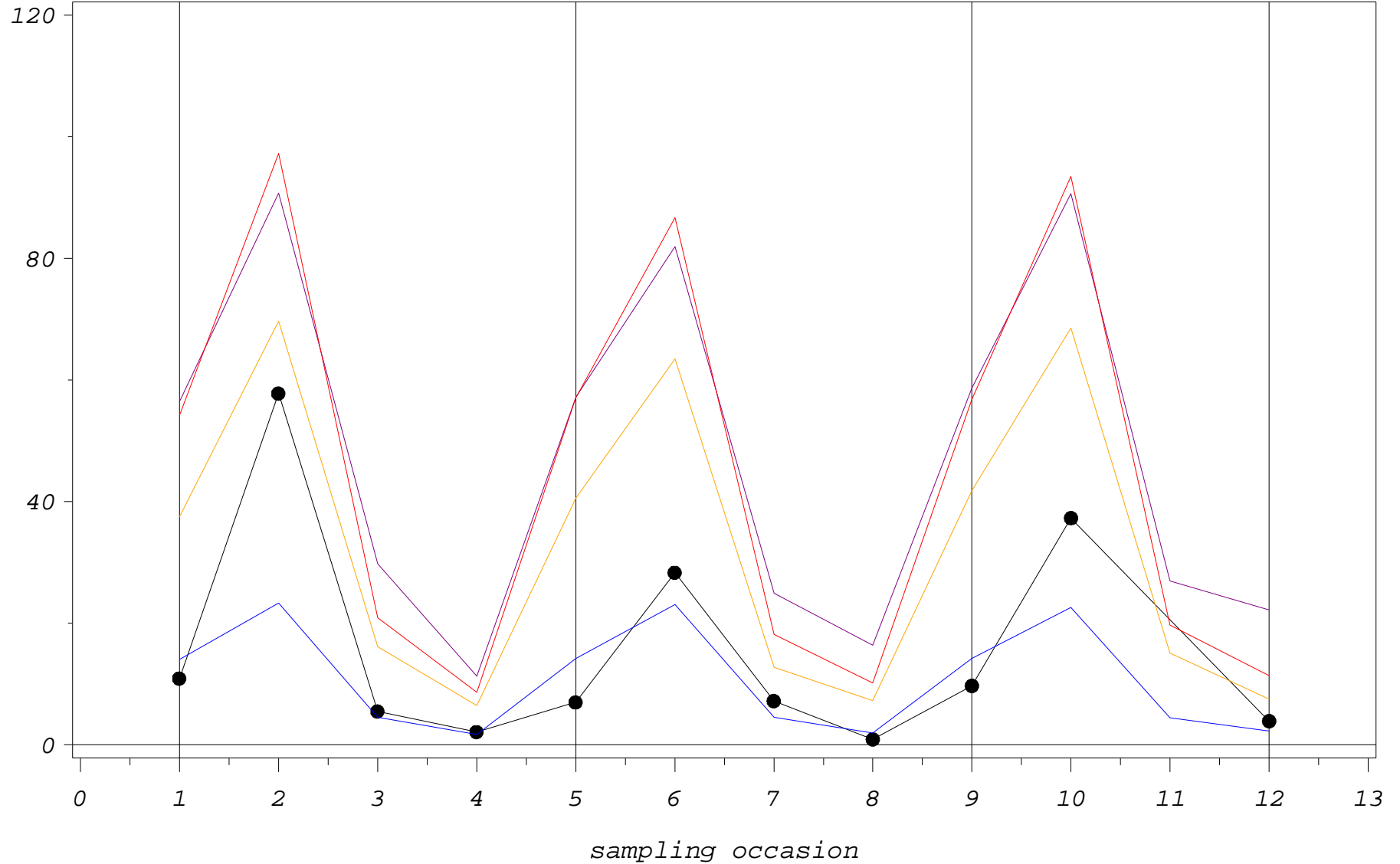
PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●—●—●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H00553

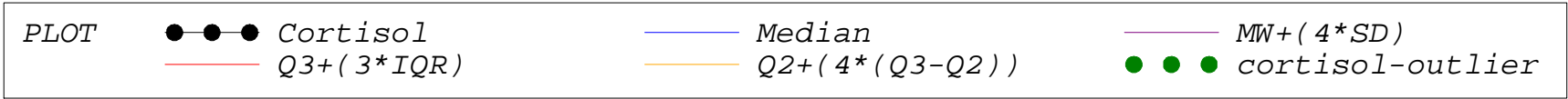
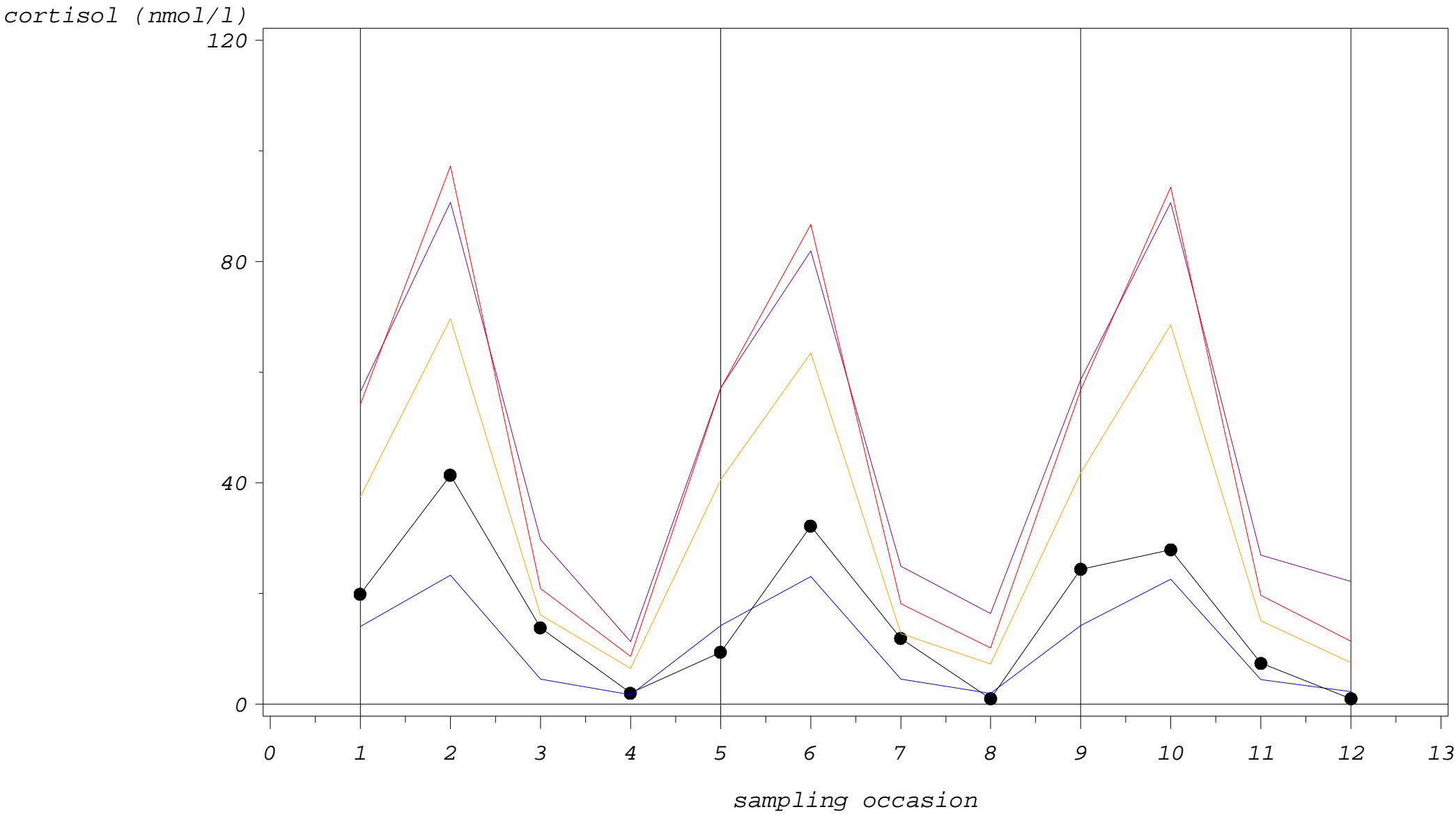
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

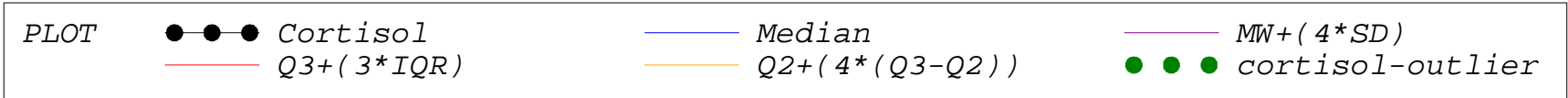
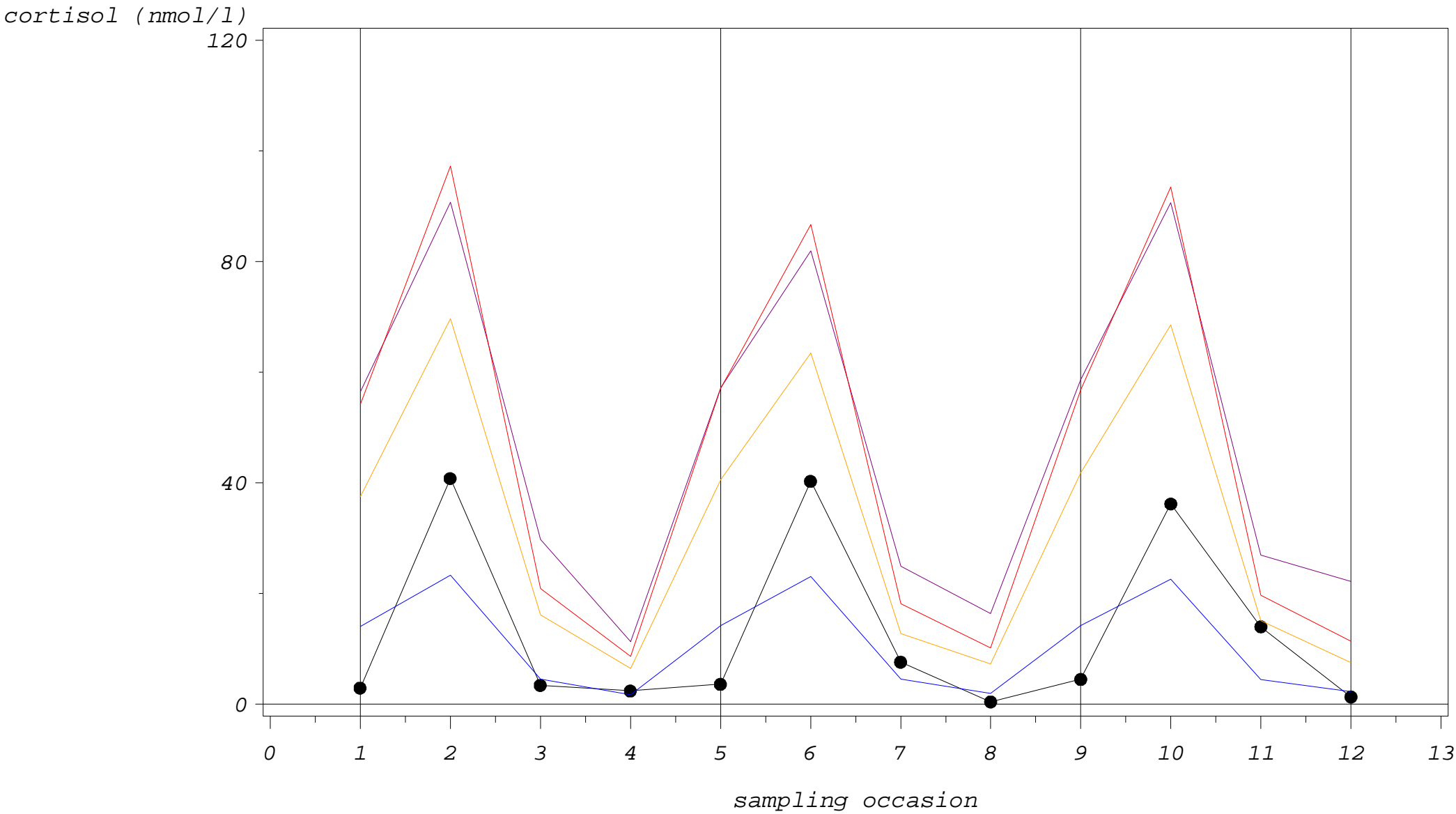
Study 2: cortisol single profiles with outlier fences

CODE=H00554



Study 2: cortisol single profiles with outlier fences

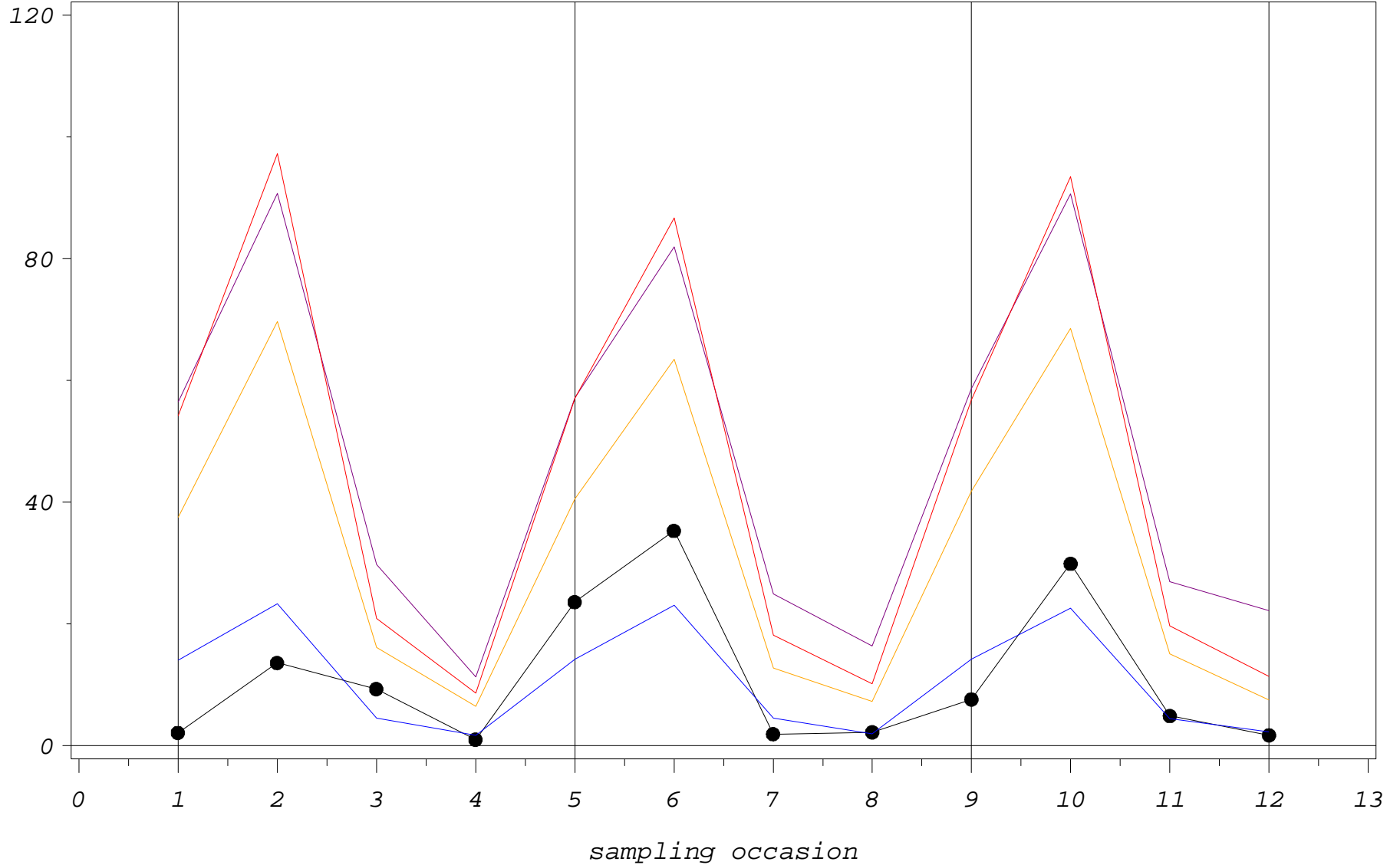
CODE=H00555



Study 2: cortisol single profiles with outlier fences

CODE=H00556

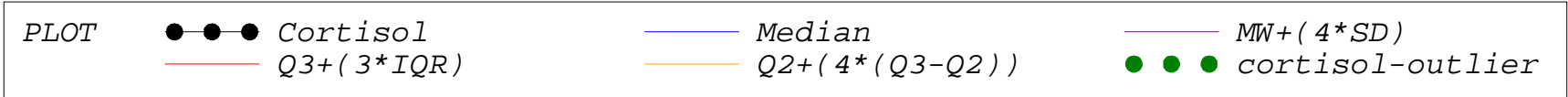
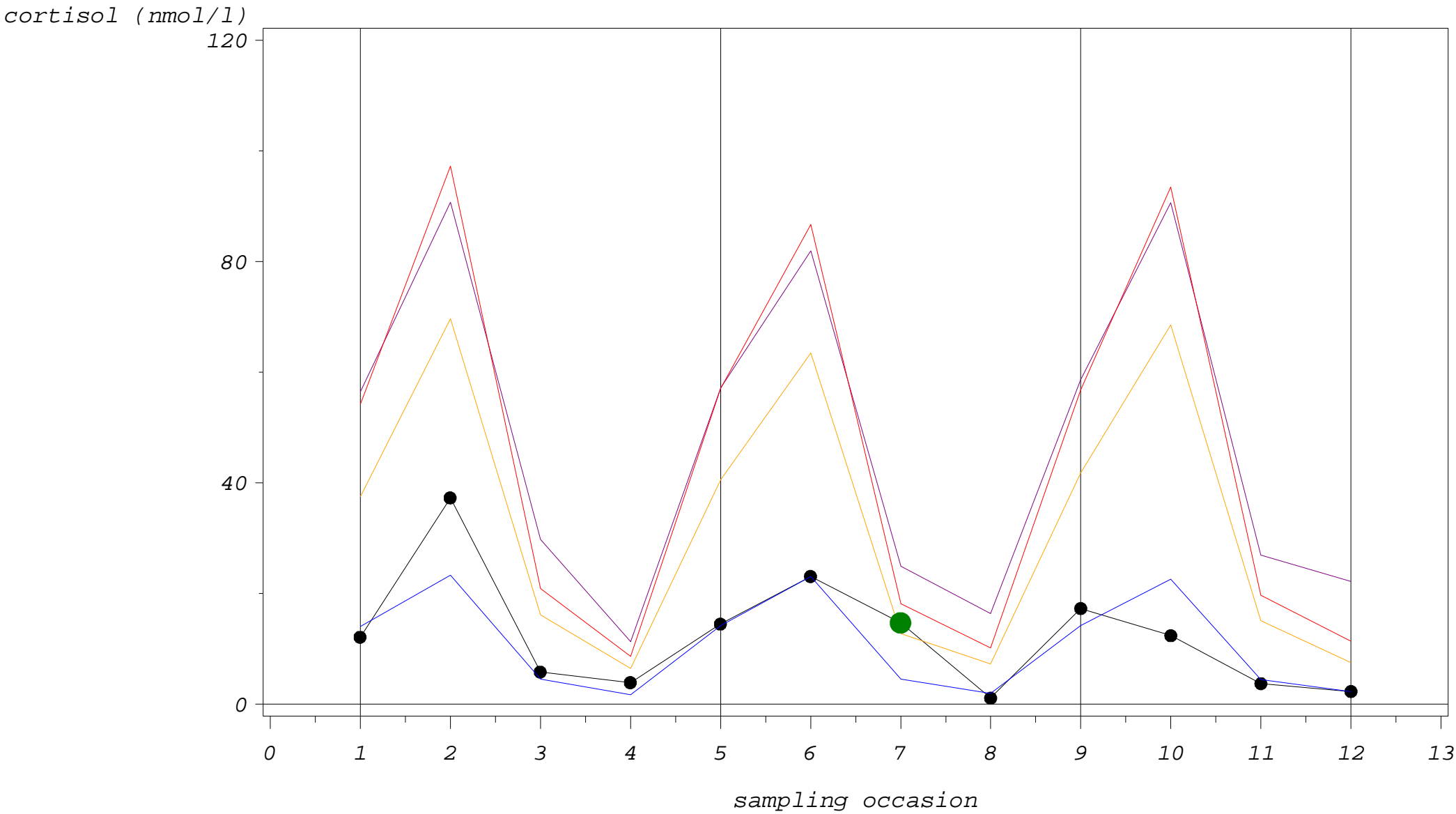
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 \cdot SD)$
 — $Q3 + (3 \cdot IQR)$ — $Q2 + (4 \cdot (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

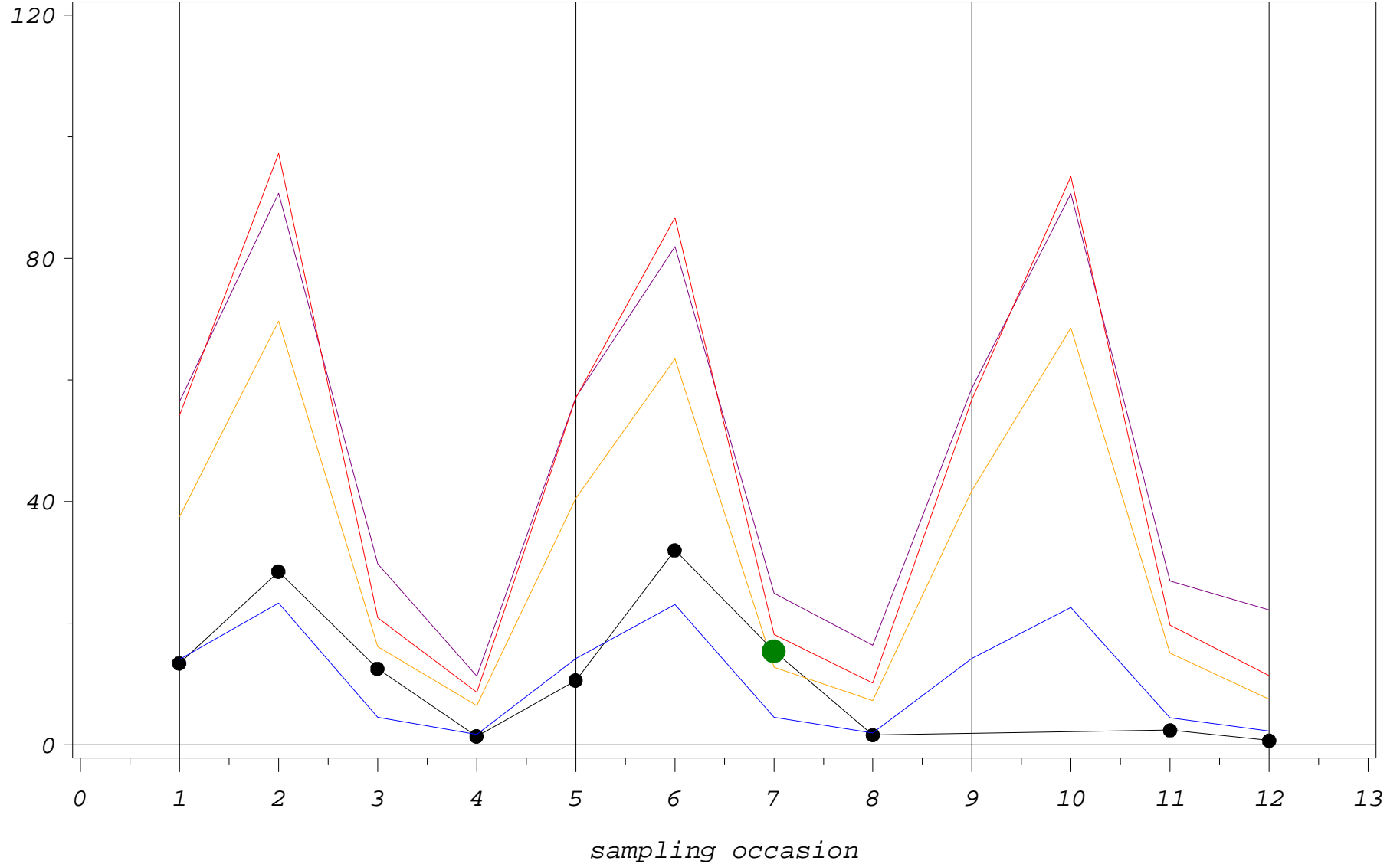
CODE=H00557



Study 2: cortisol single profiles with outlier fences

CODE=H00558

cortisol (nmol/l)



PLOT

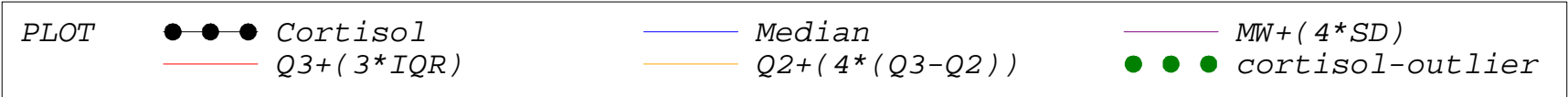
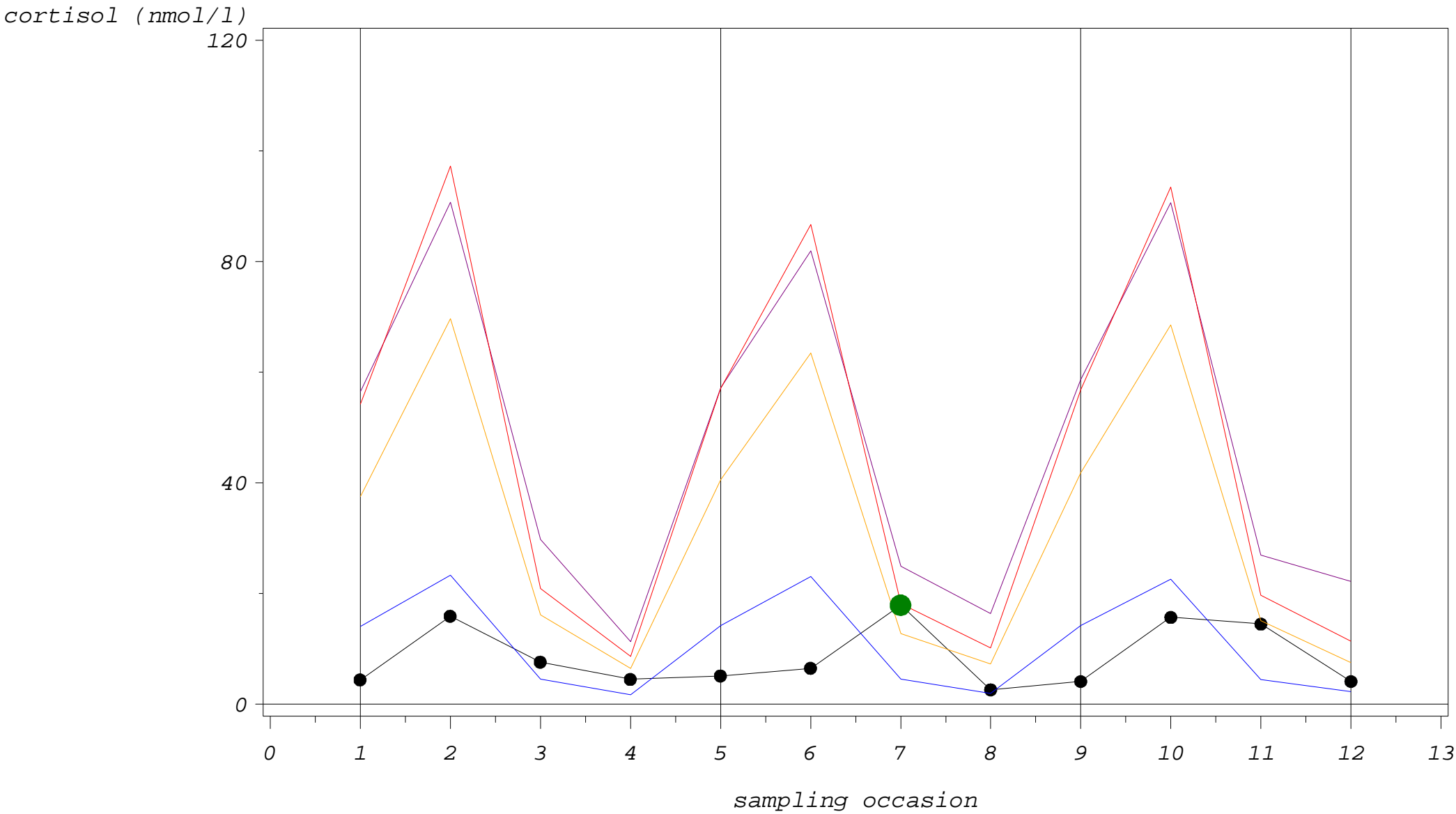
●—●—● Cortisol
— Q3+(3*IQR)

— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

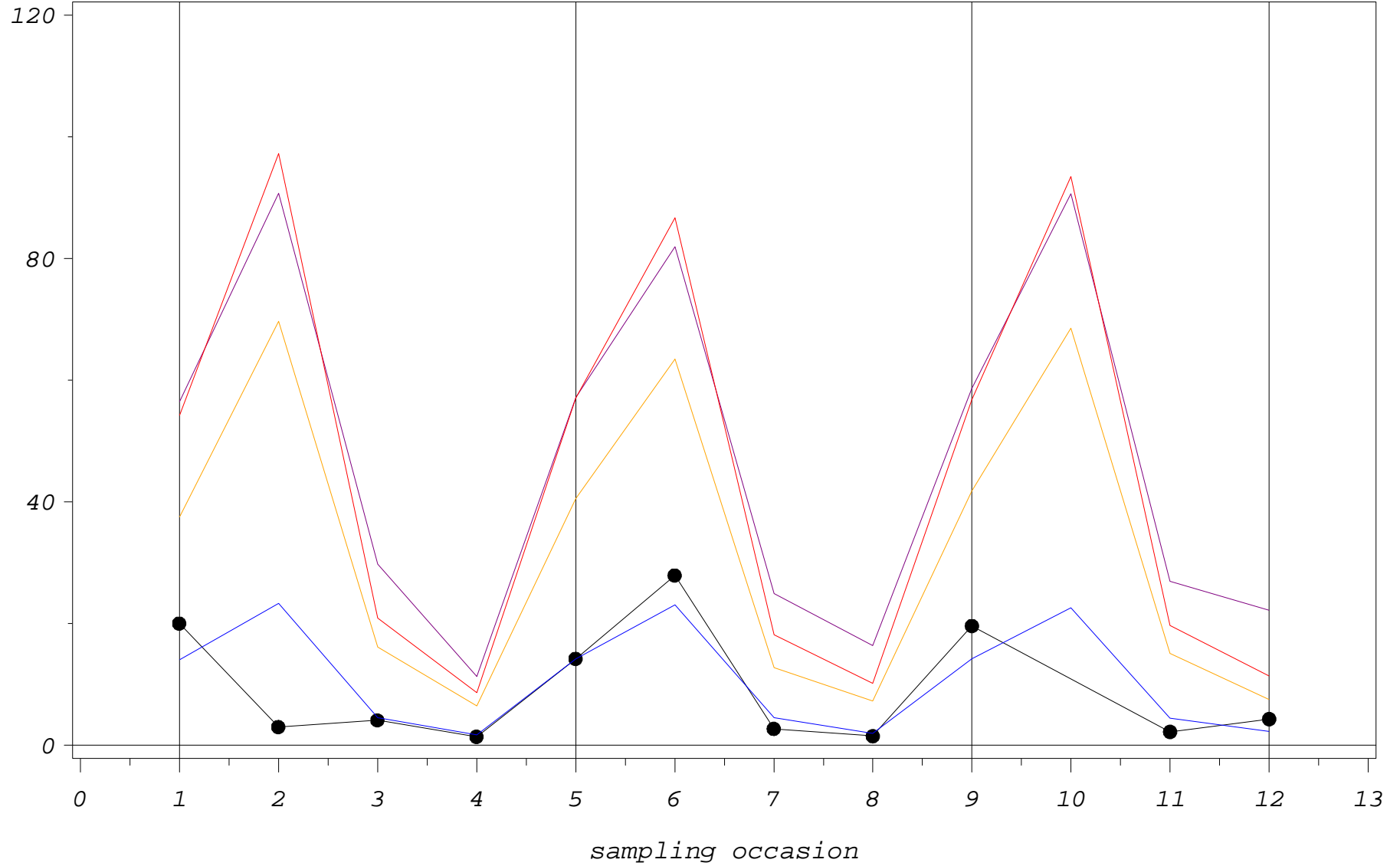
CODE=H00561



Study 2: cortisol single profiles with outlier fences

CODE=H00562

cortisol (nmol/l)

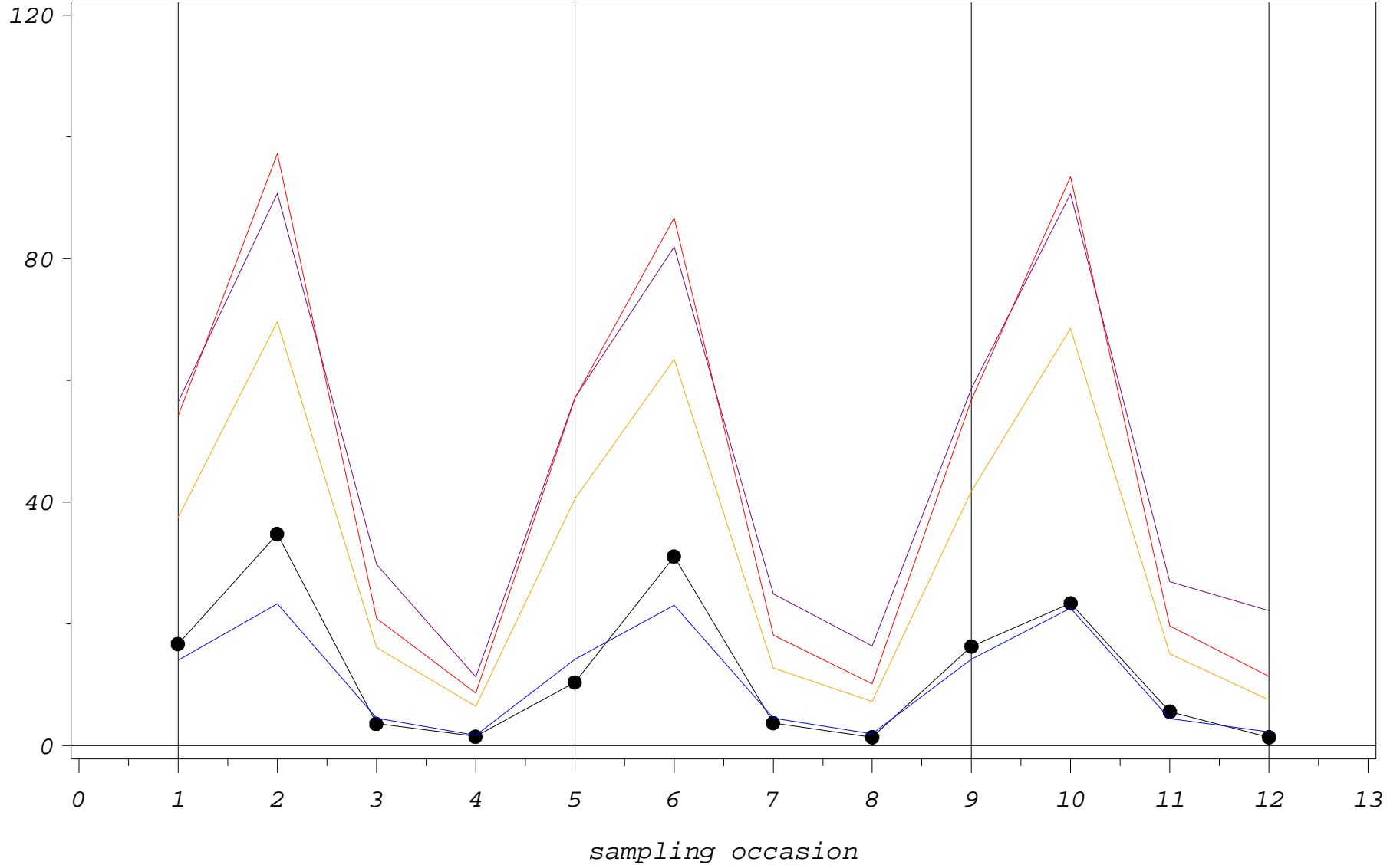


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H00563

cortisol (nmol/l)

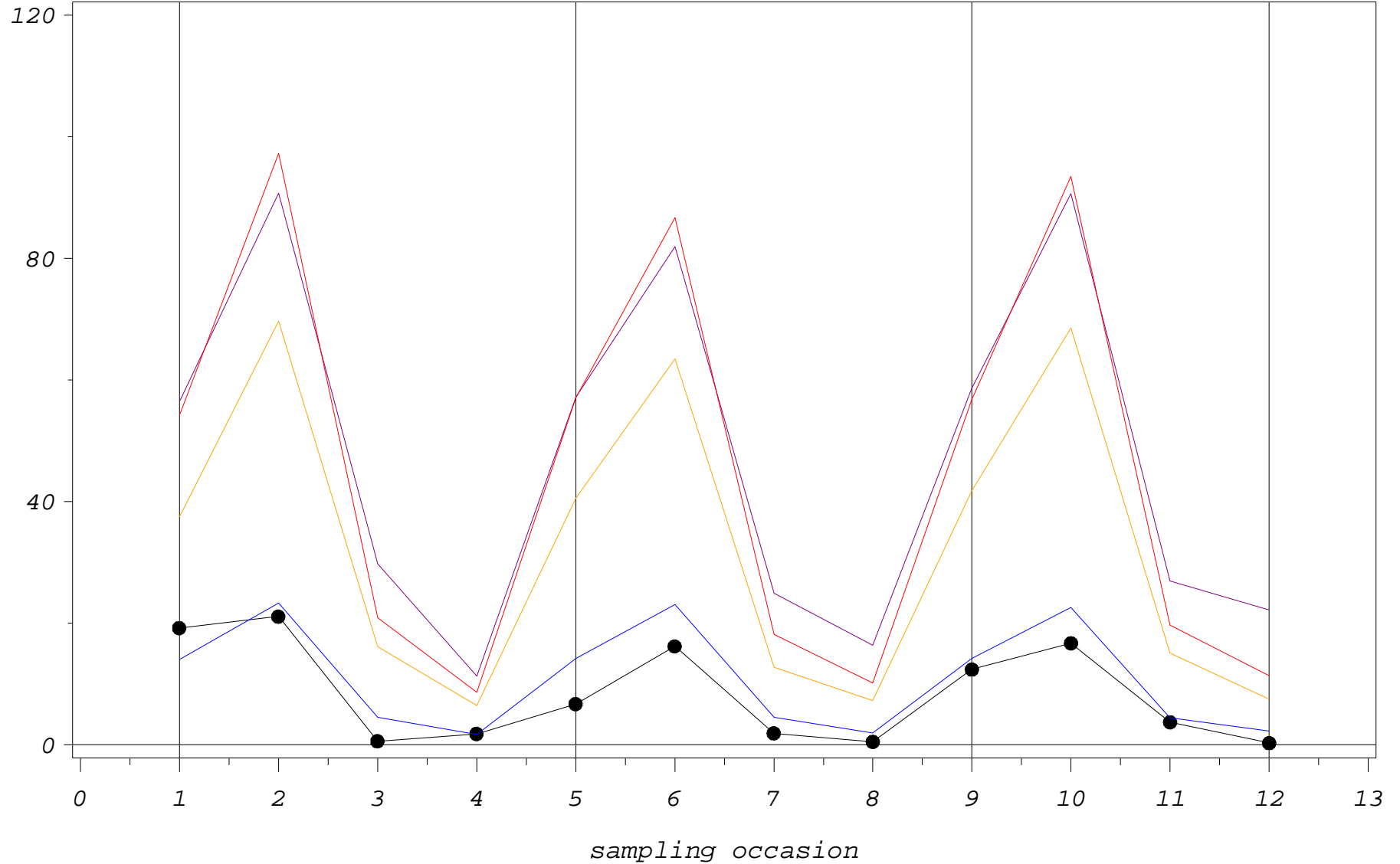


PLOT ●—●—● Cortisol — Median — $MW + (4 * SD)$
 — $Q3 + (3 * IQR)$ — $Q2 + (4 * (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H00565

cortisol (nmol/l)



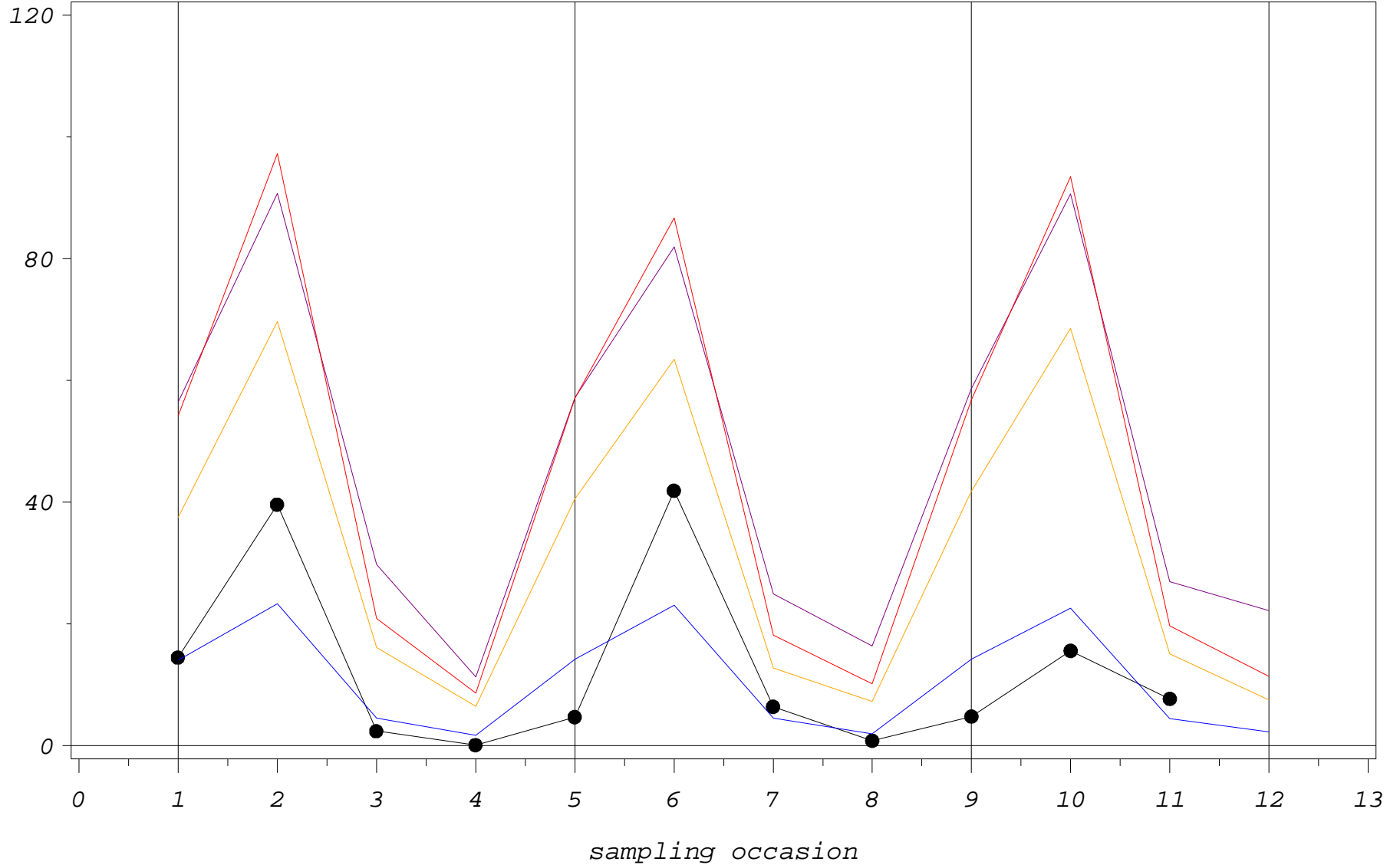
PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H00568

cortisol (nmol/l)



PLOT

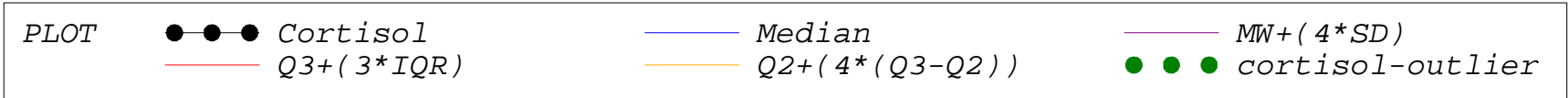
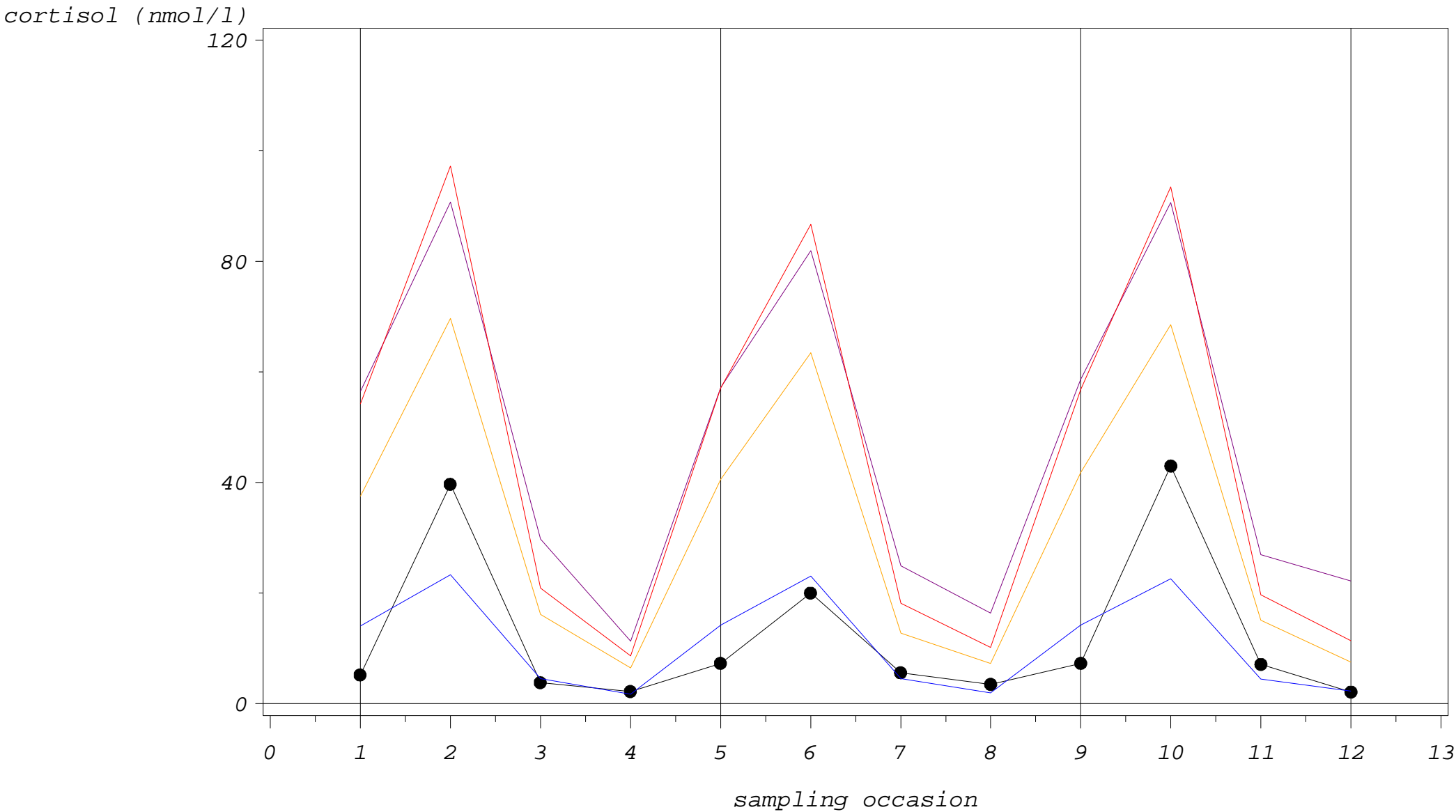
●—●—● Cortisol
— Q3+(3*IQR)

— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
● ● ● cortisol-outlier

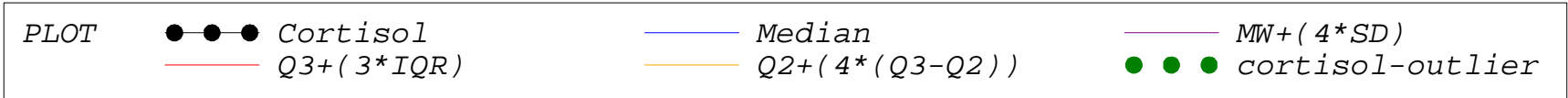
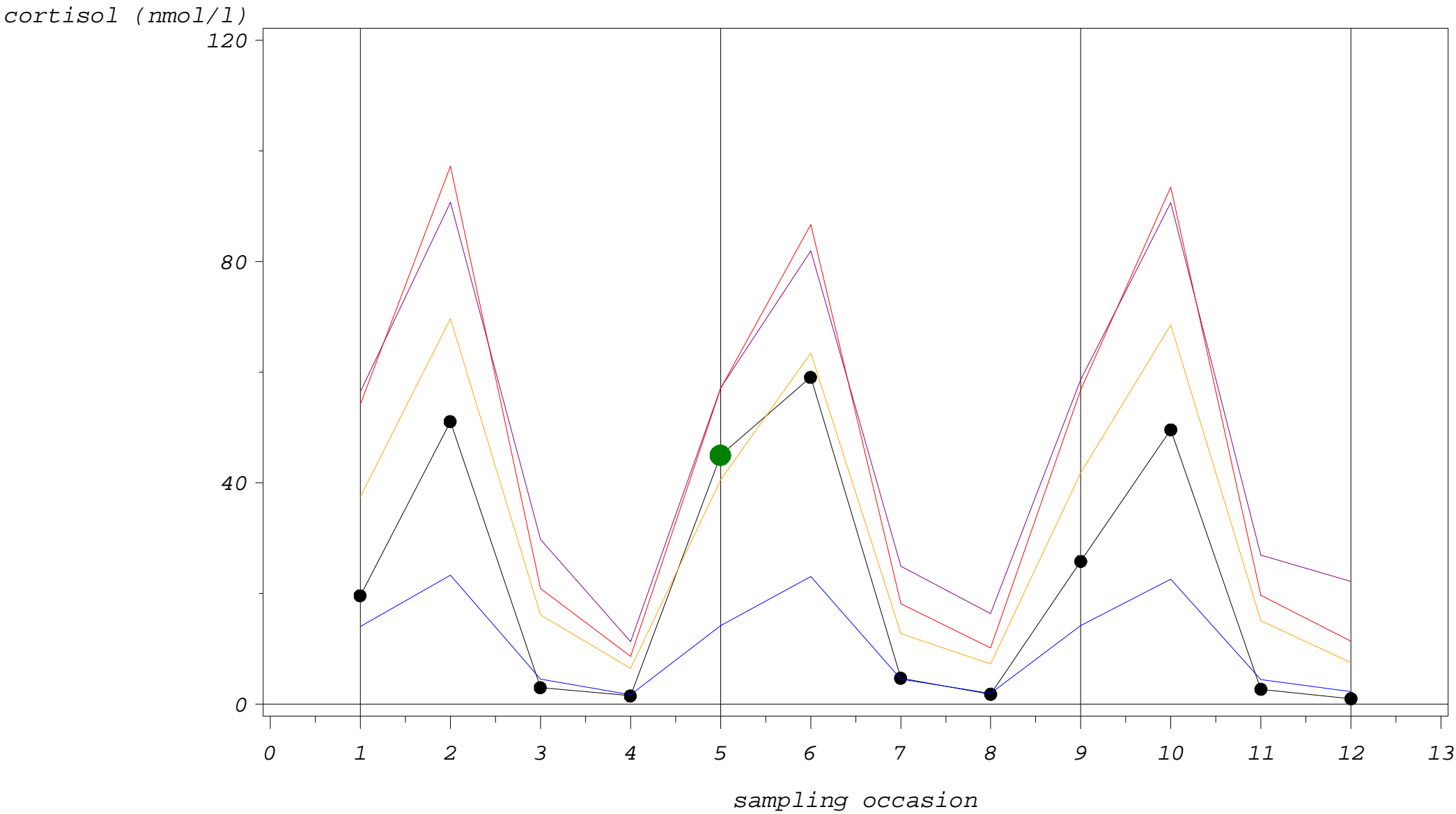
Study 2: cortisol single profiles with outlier fences

CODE=H00571



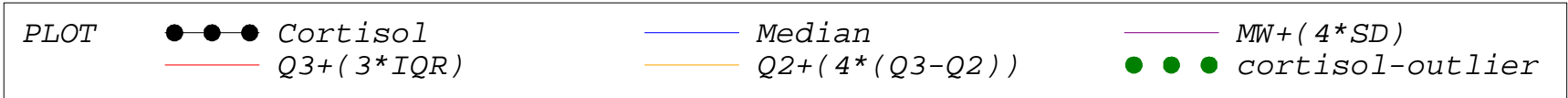
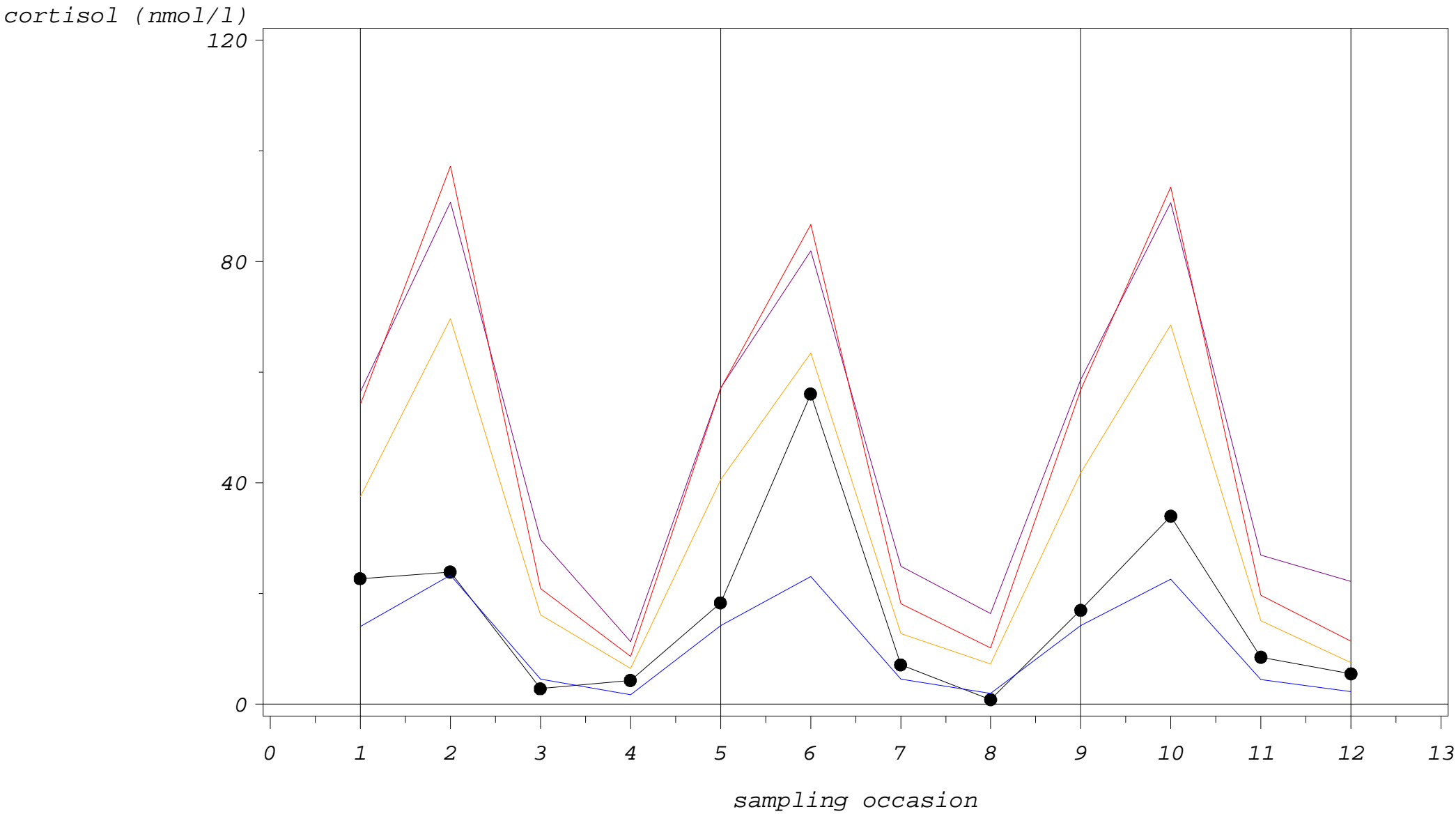
Study 2: cortisol single profiles with outlier fences

CODE=H00602



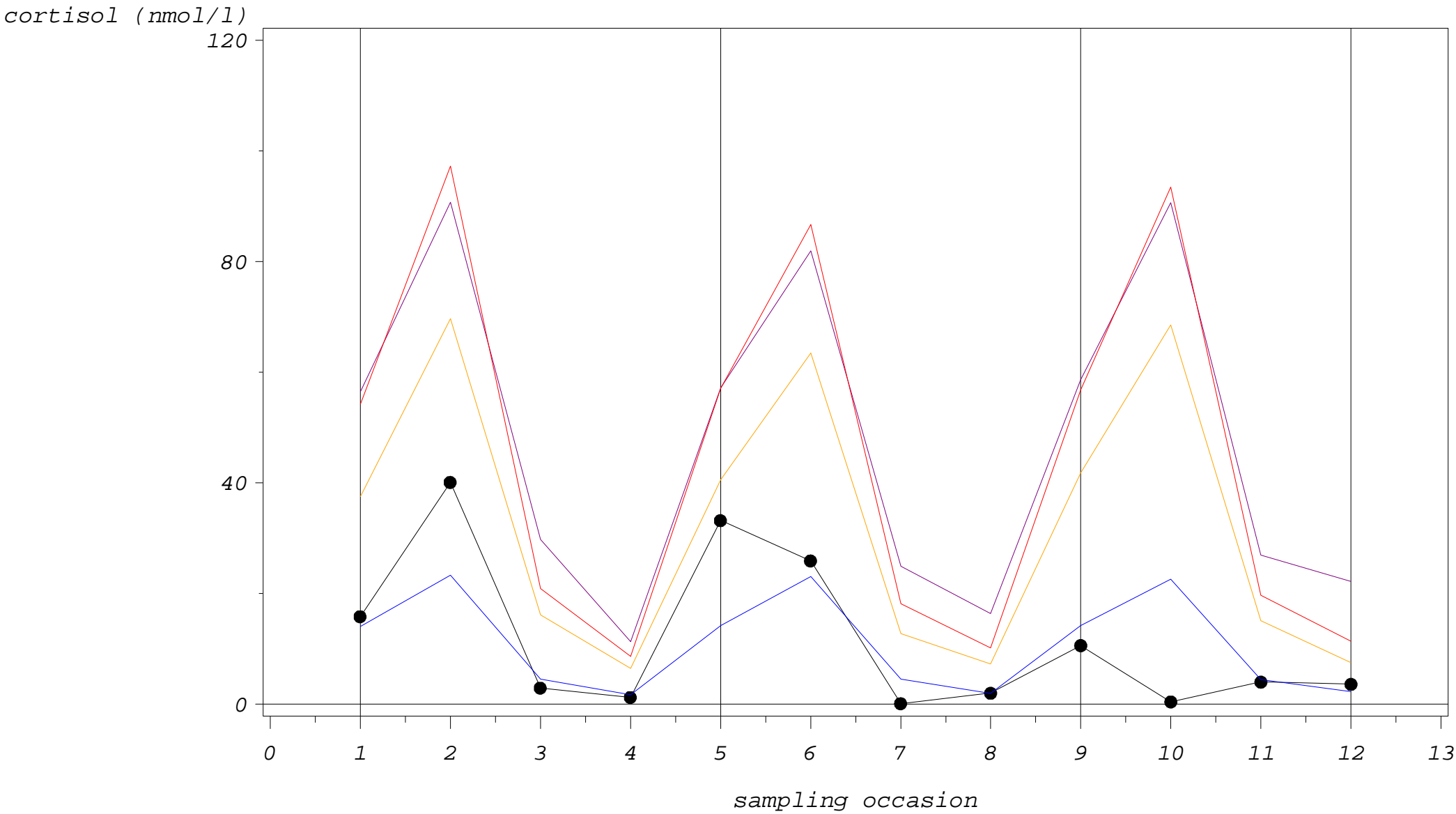
Study 2: cortisol single profiles with outlier fences

CODE=H00604



Study 2: cortisol single profiles with outlier fences

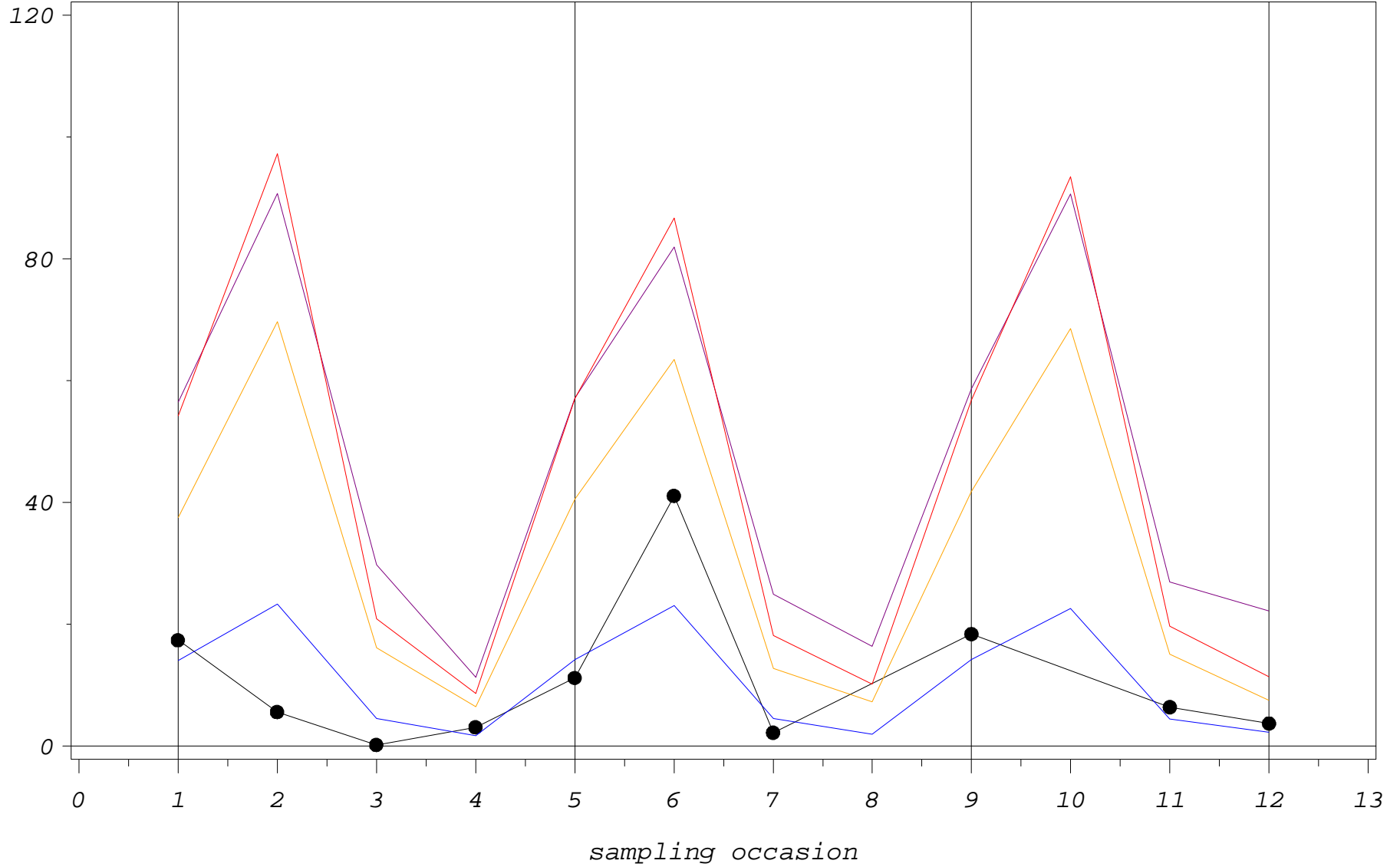
CODE=H00605



Study 2: cortisol single profiles with outlier fences

CODE=H00606

cortisol (nmol/l)

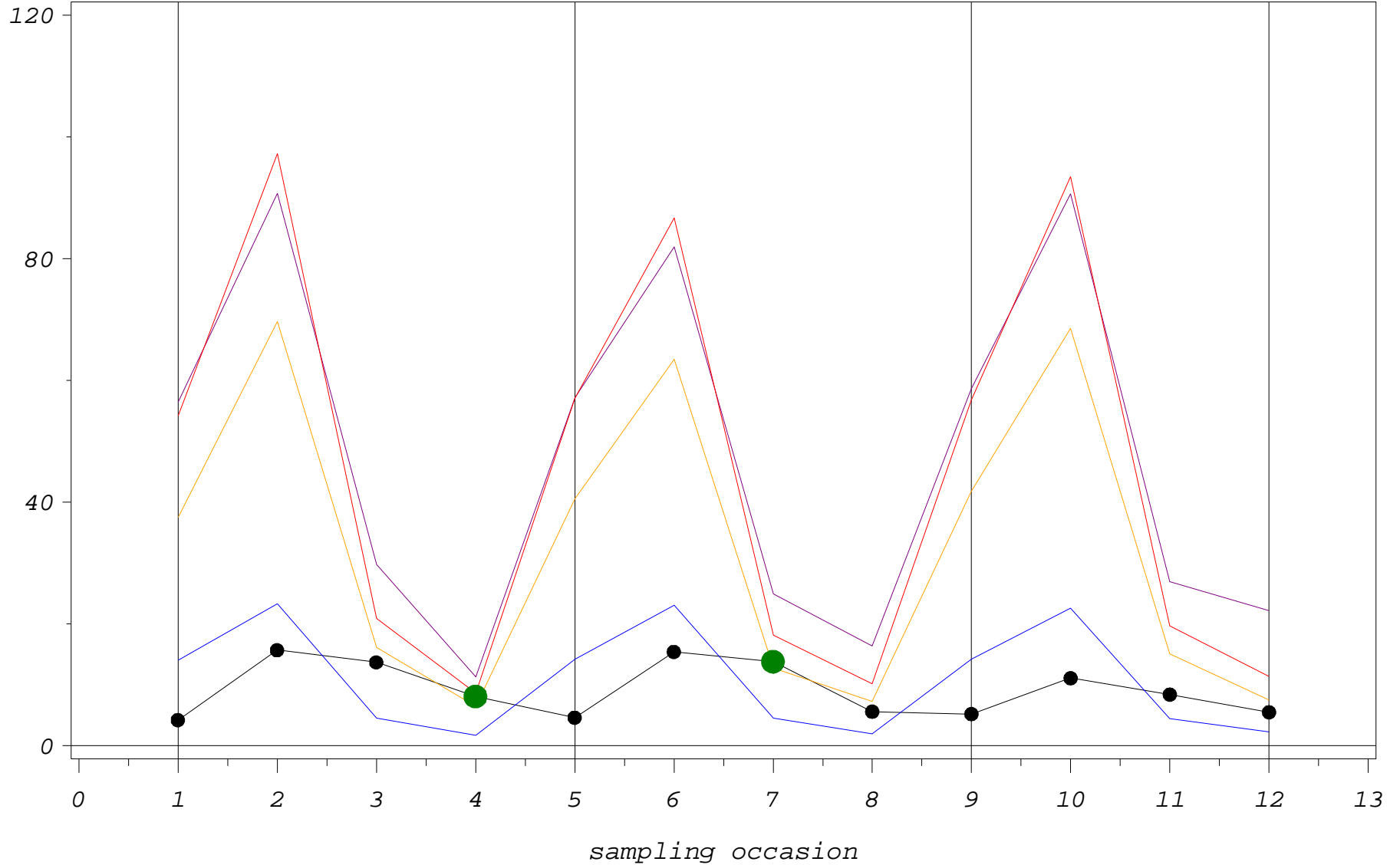


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H00611

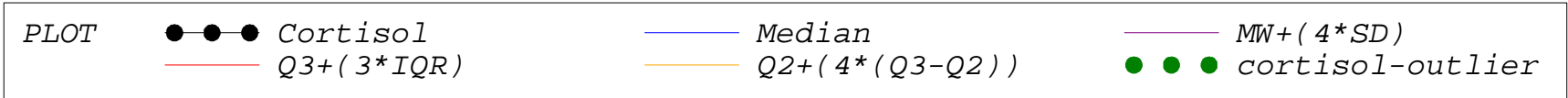
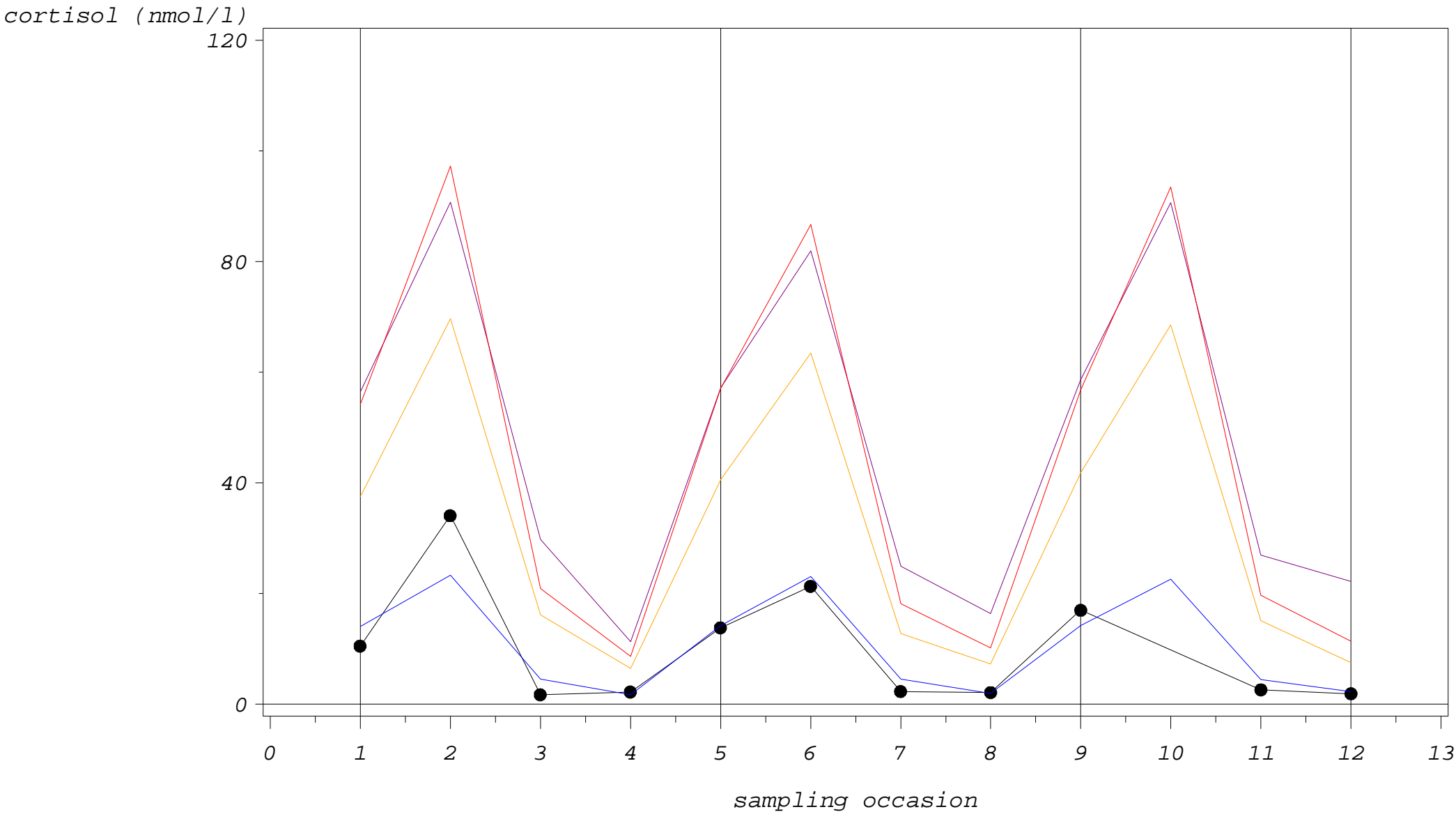
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

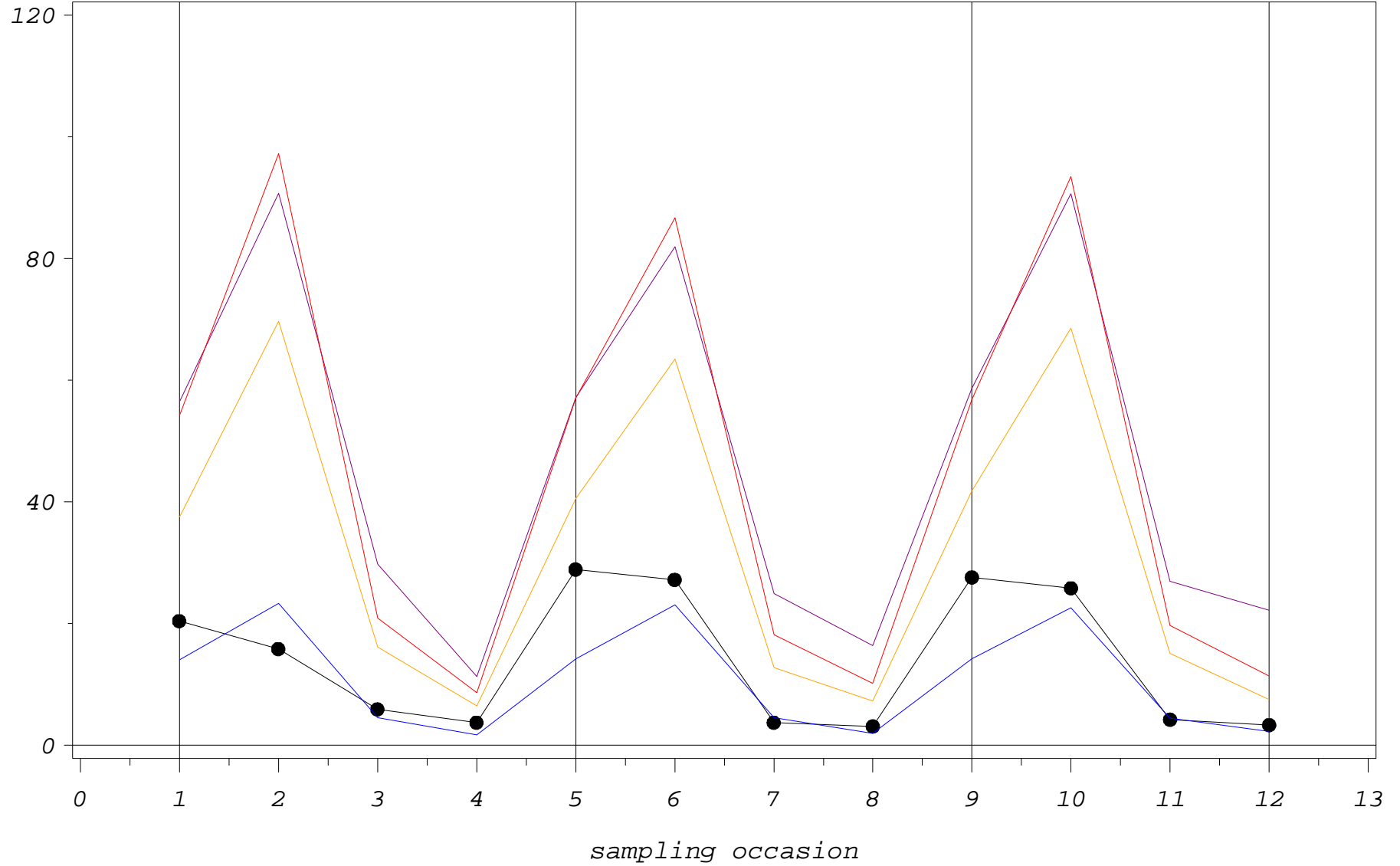
CODE=H00612



Study 2: cortisol single profiles with outlier fences

CODE=H00613

cortisol (nmol/l)

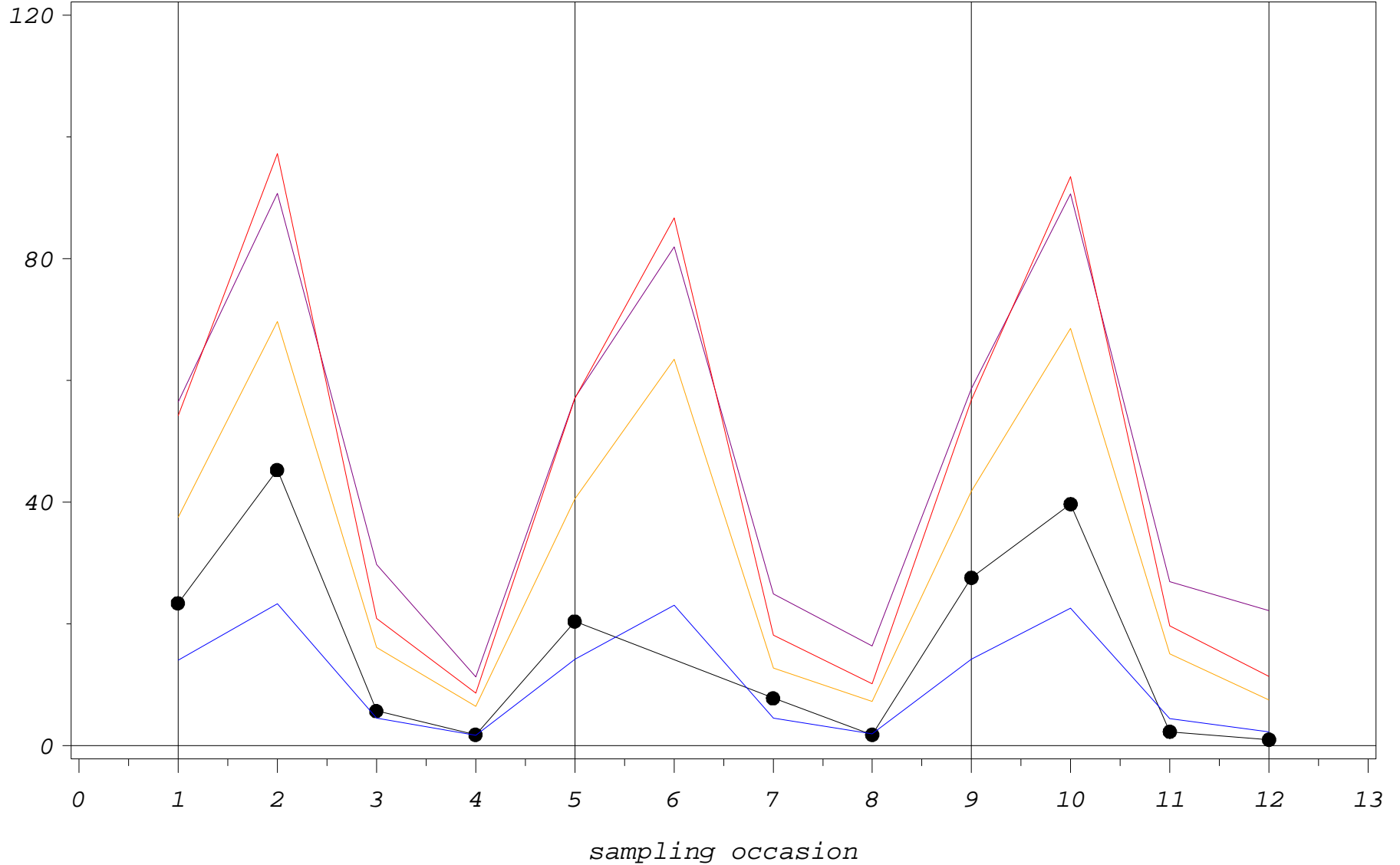


PLOT	●—●—● Cortisol	— Median	— MW+(4*SD)
	— Q3+(3*IQR)	— Q2+(4*(Q3-Q2))	● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H00615

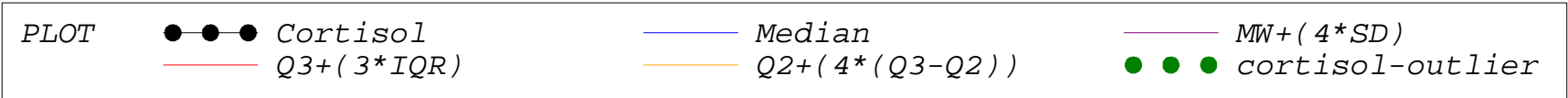
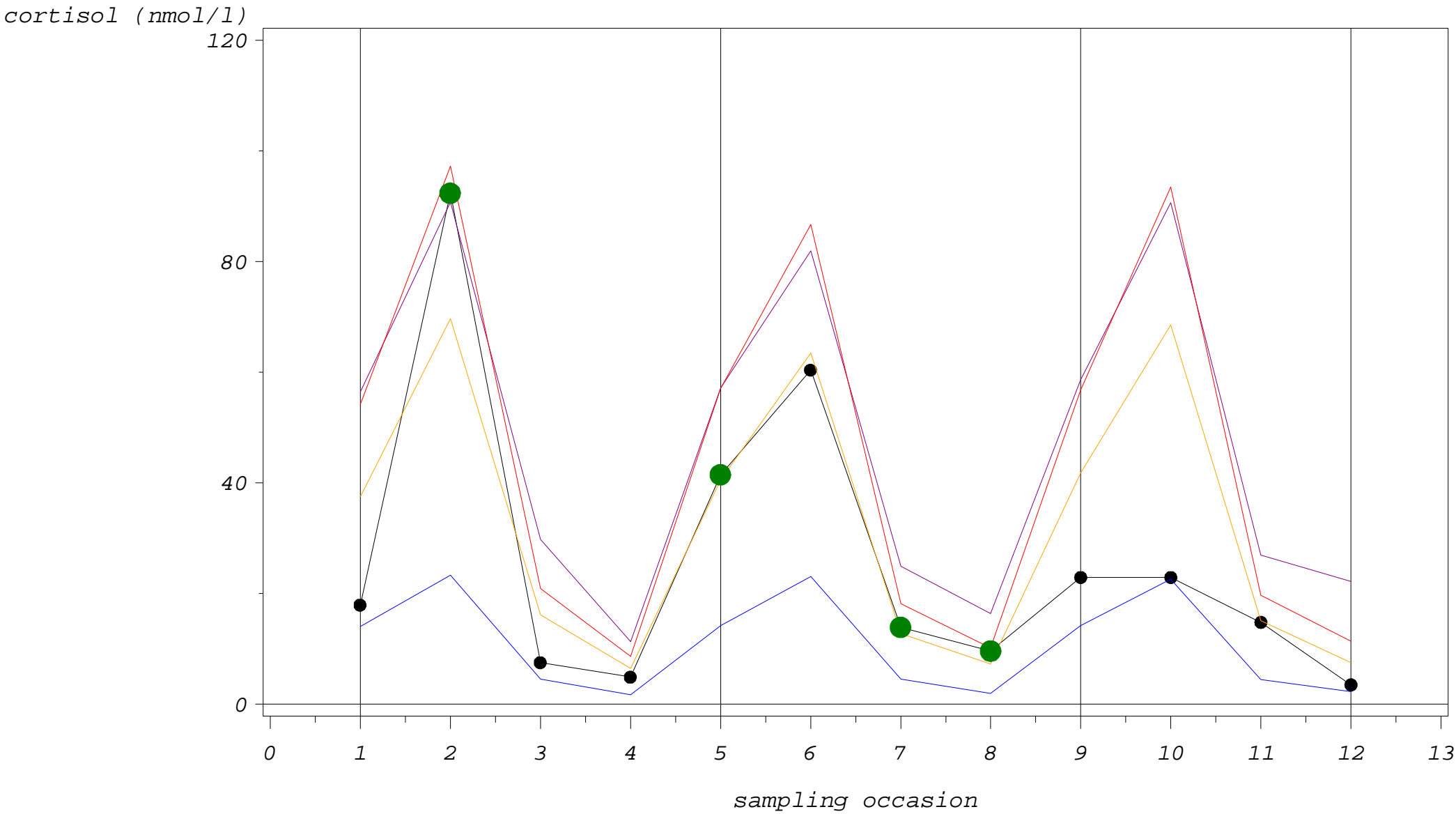
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

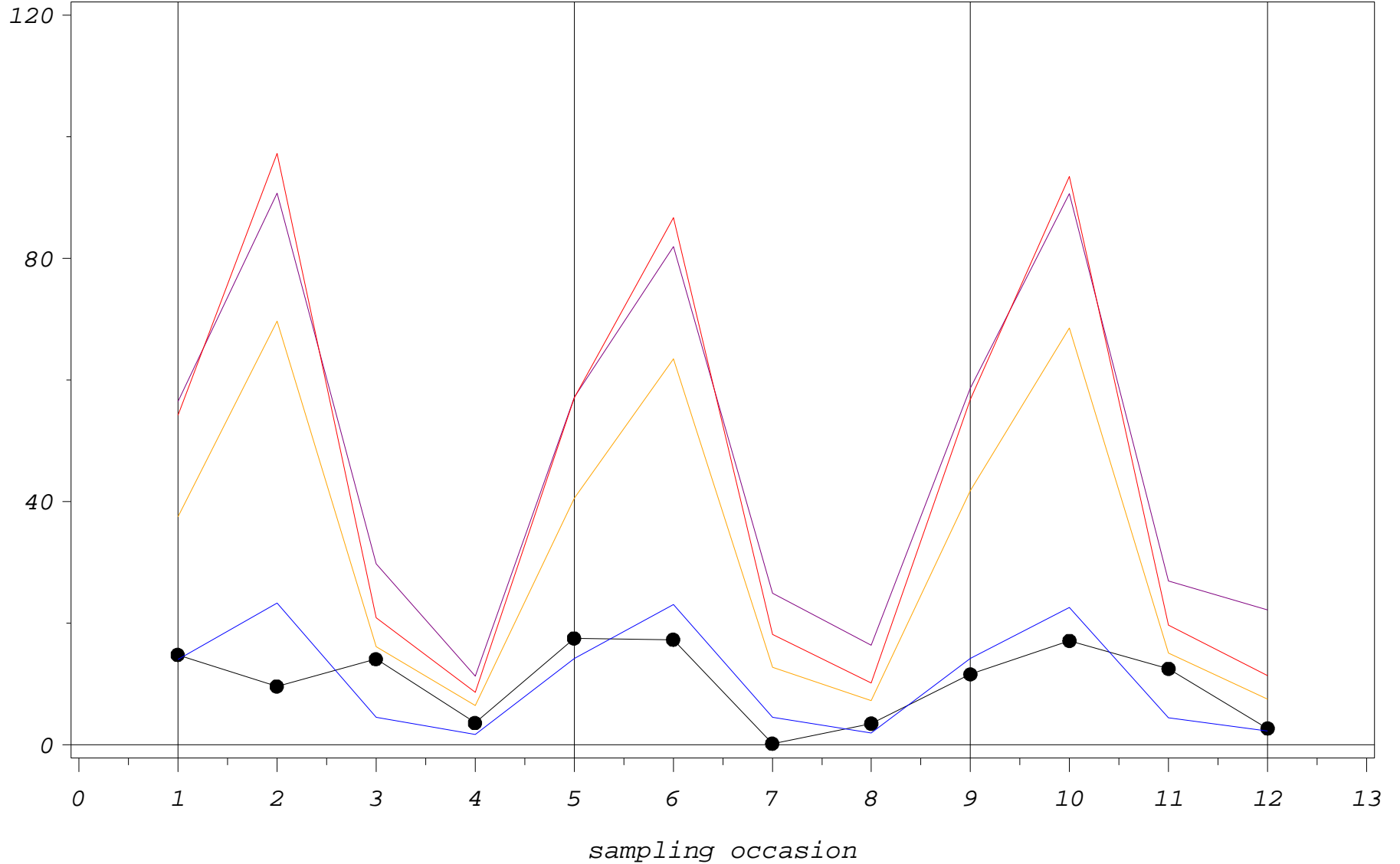
CODE=H00616



Study 2: cortisol single profiles with outlier fences

CODE=H00617

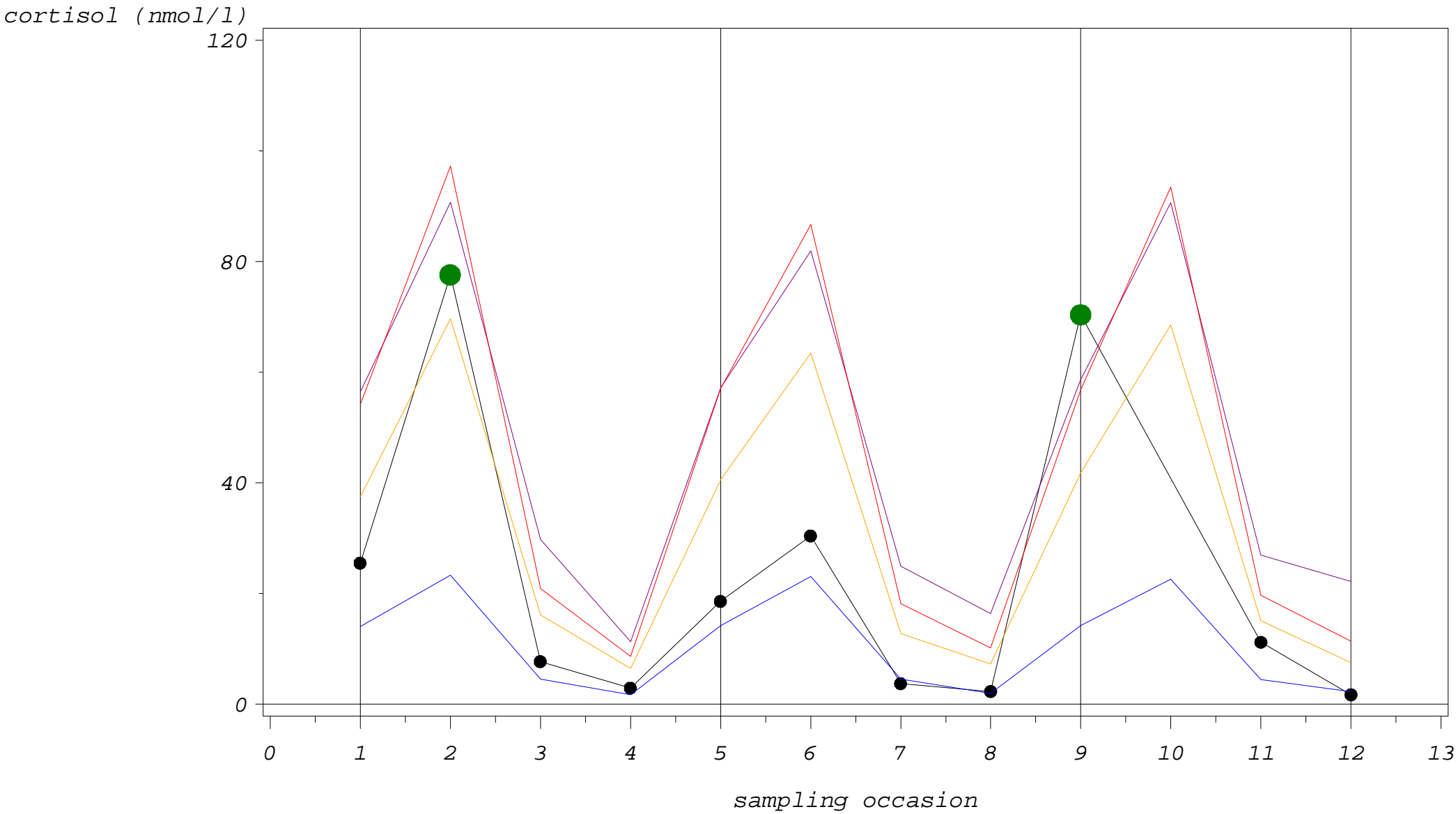
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

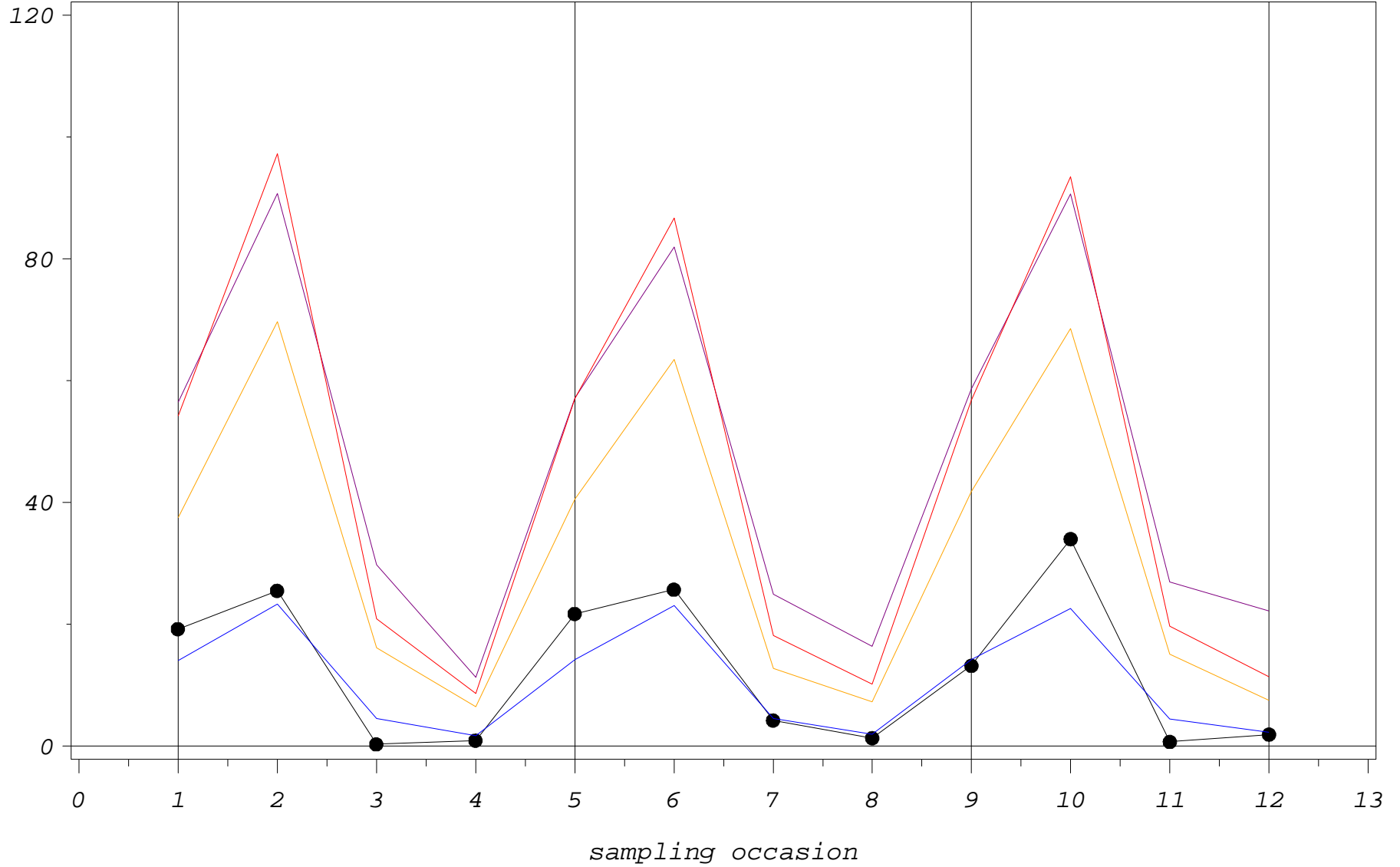
CODE=H00618



Study 2: cortisol single profiles with outlier fences

CODE=H00619

cortisol (nmol/l)



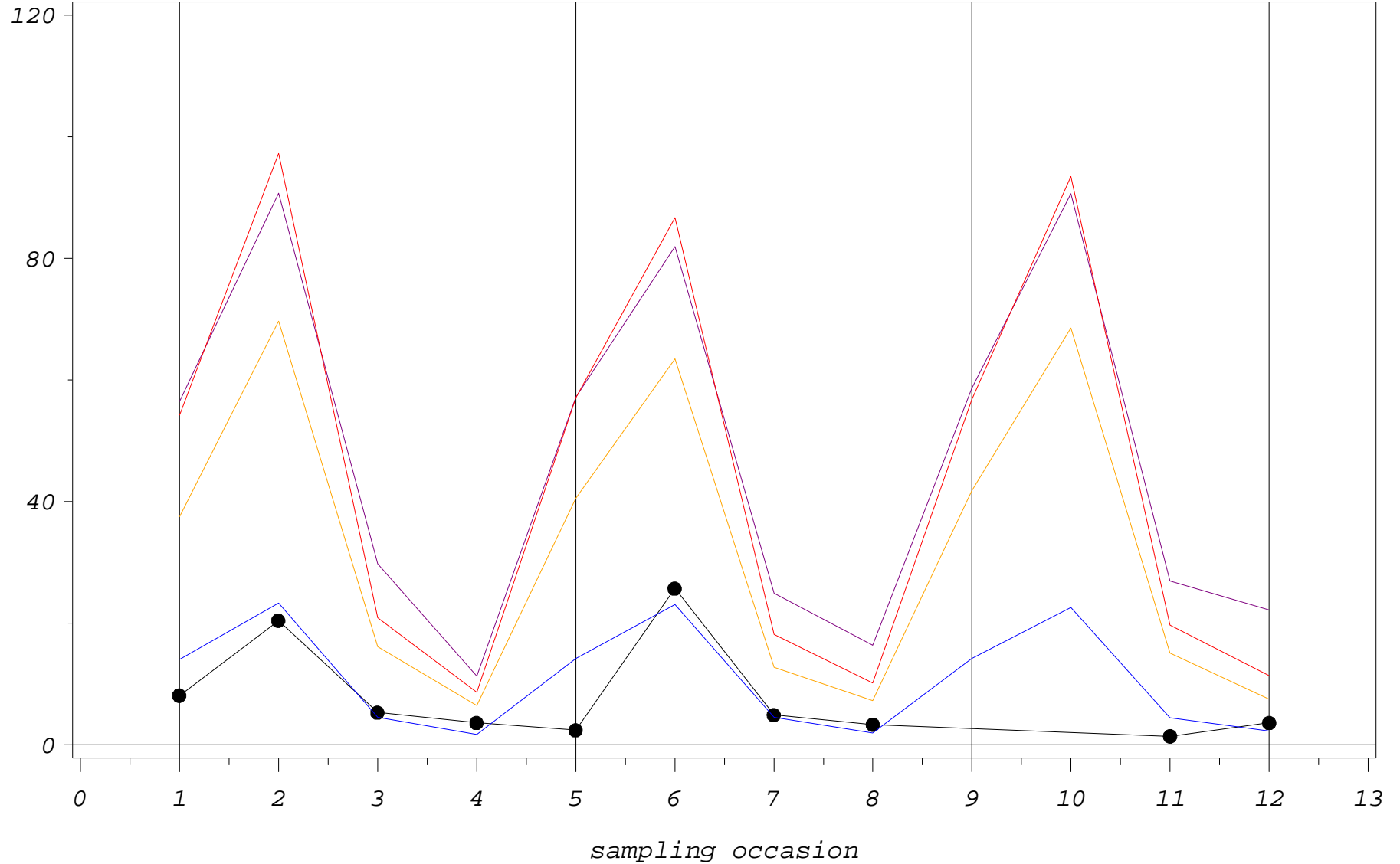
PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H00620

cortisol (nmol/l)

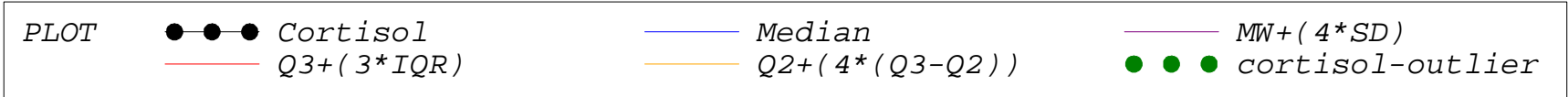
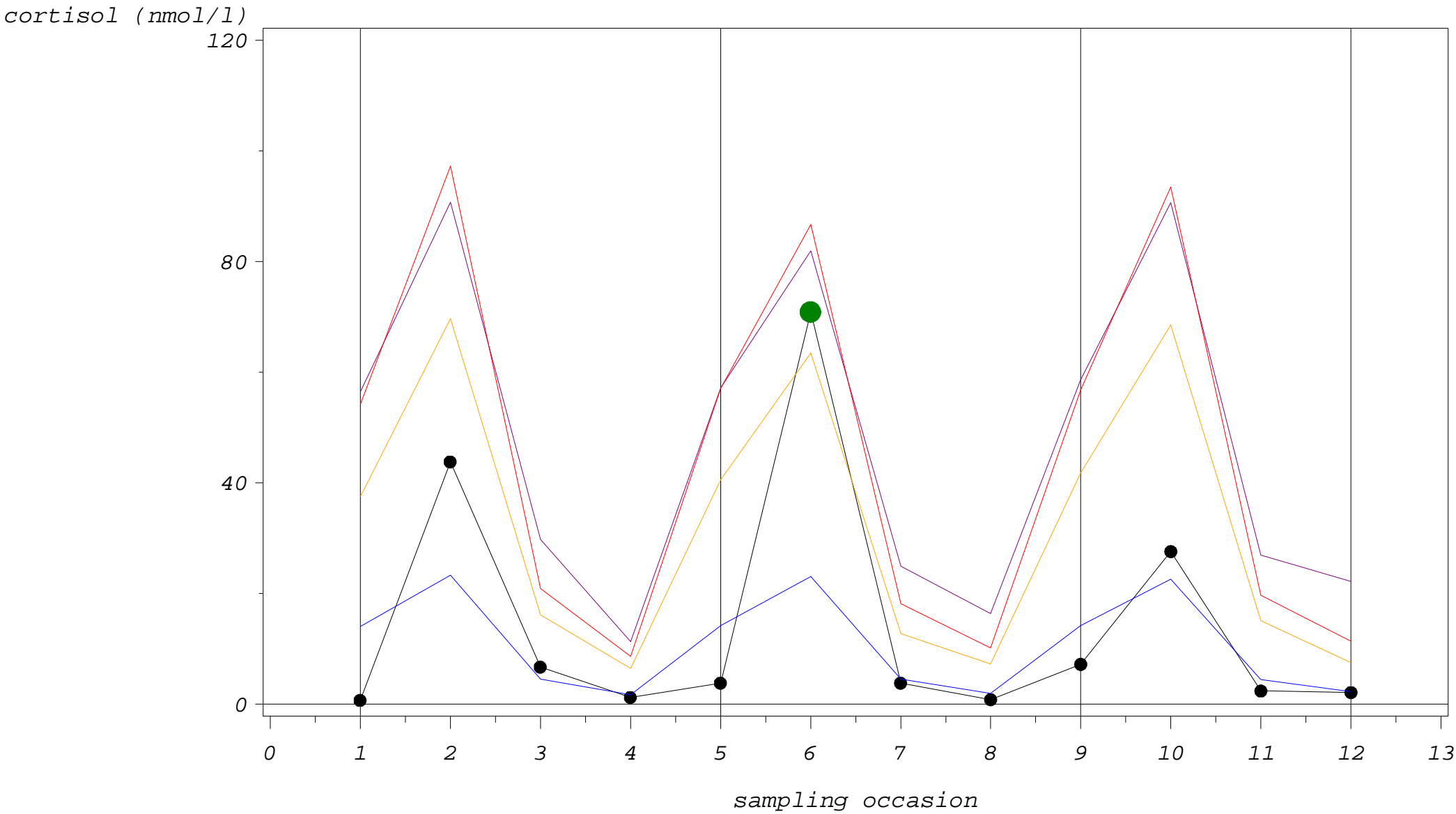


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

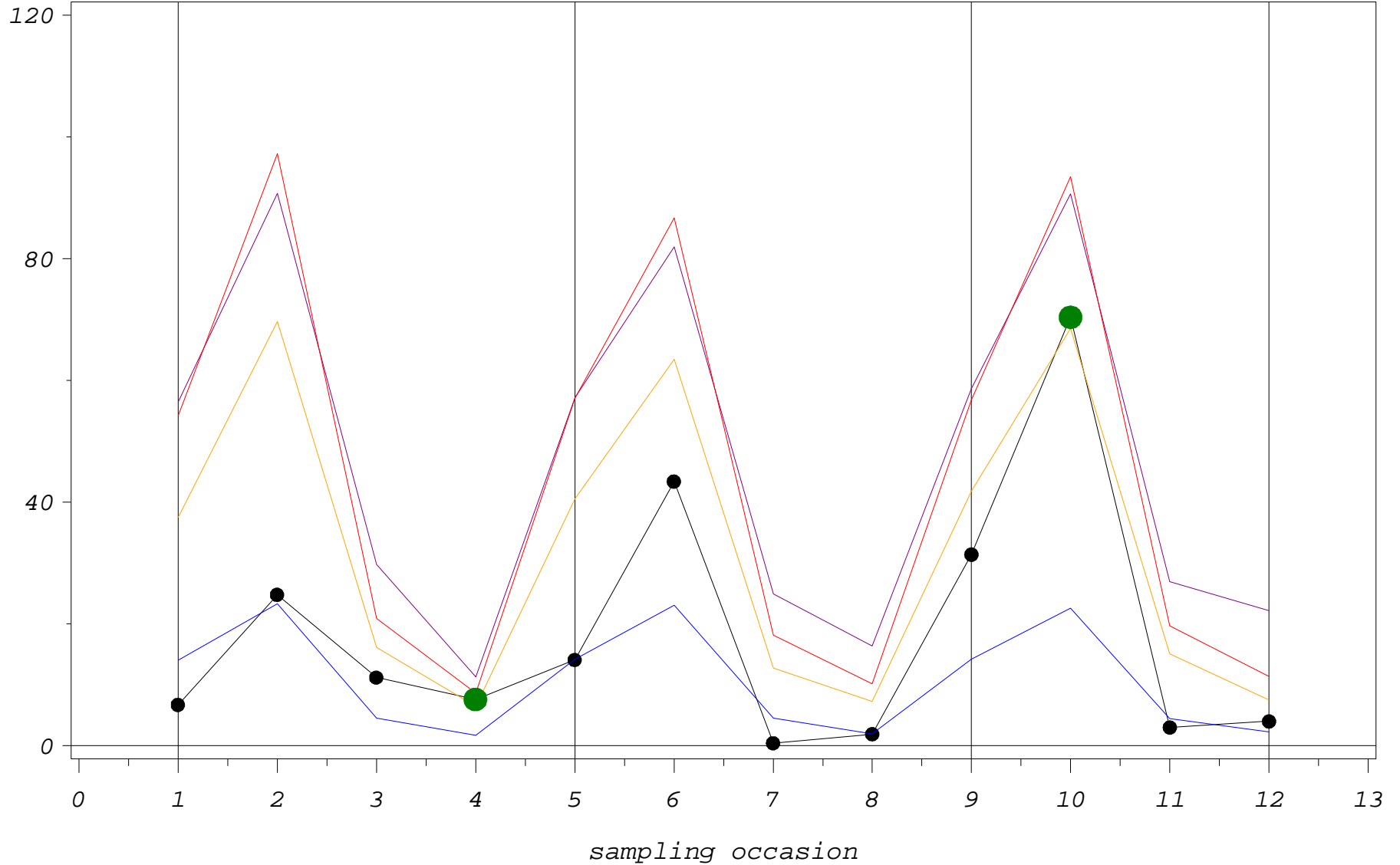
CODE=H00625



Study 2: cortisol single profiles with outlier fences

CODE=H00626

cortisol (nmol/l)



PLOT

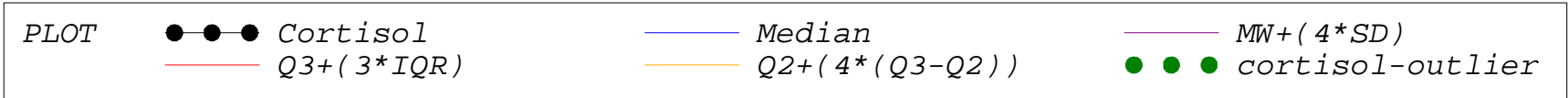
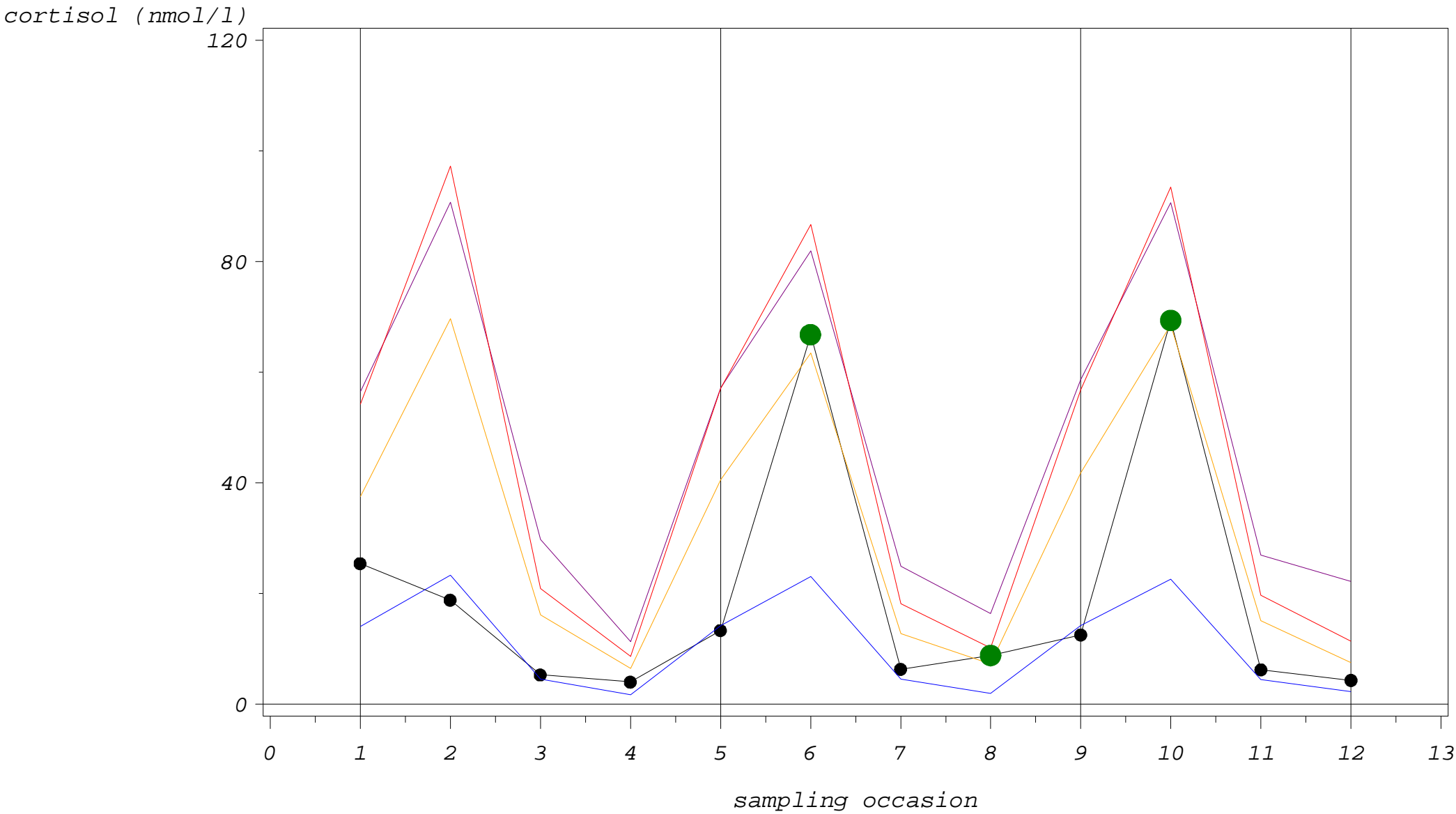
●—● Cortisol
— Q3+(3*IQR)

— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
●●● cortisol-outlier

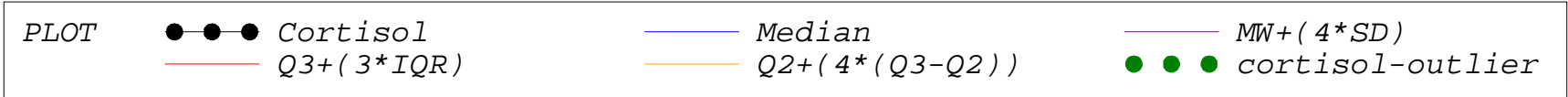
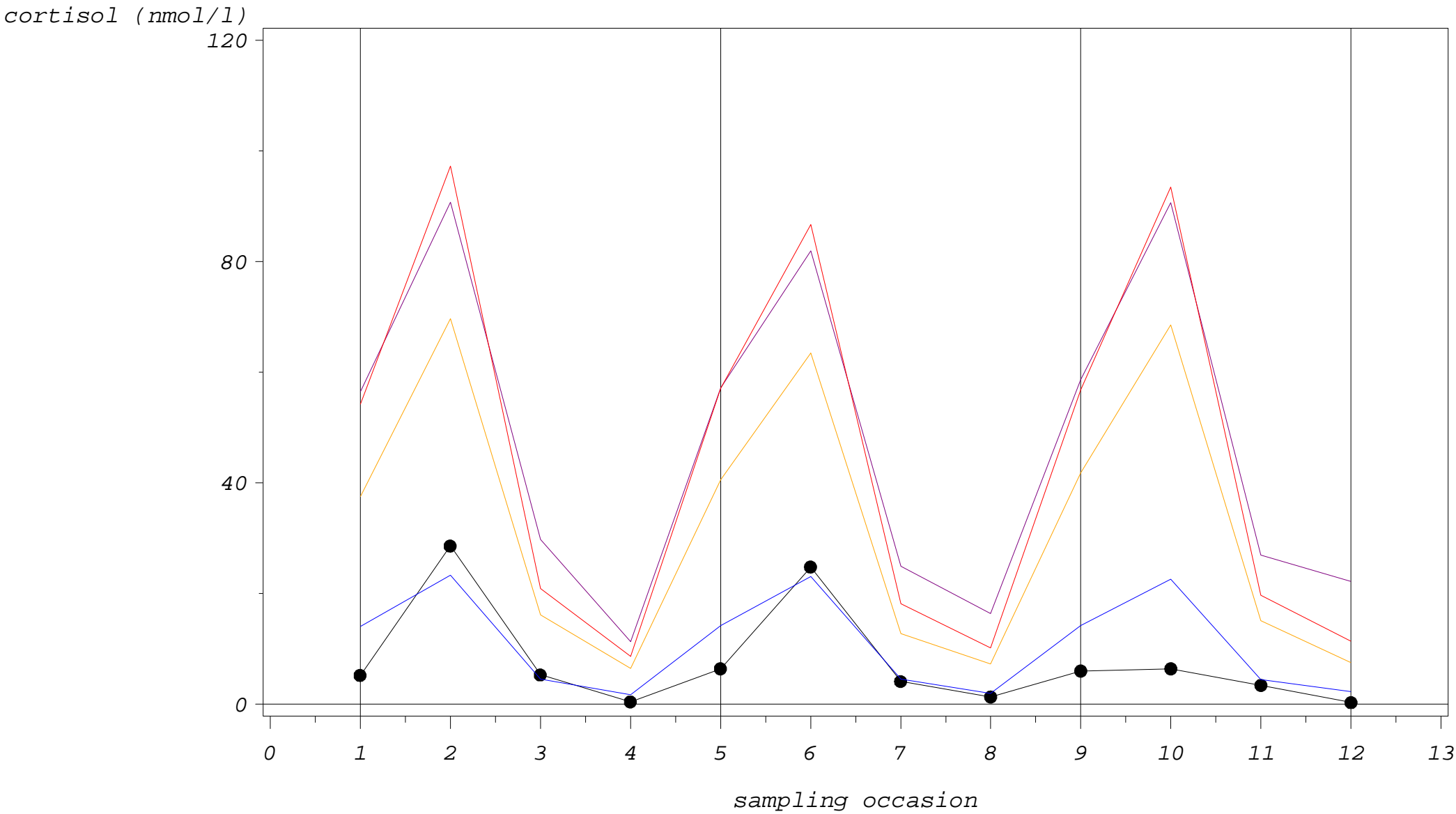
Study 2: cortisol single profiles with outlier fences

CODE=H00627



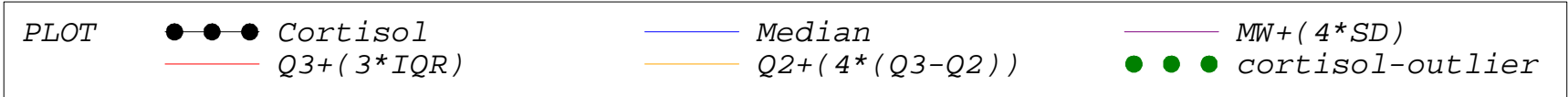
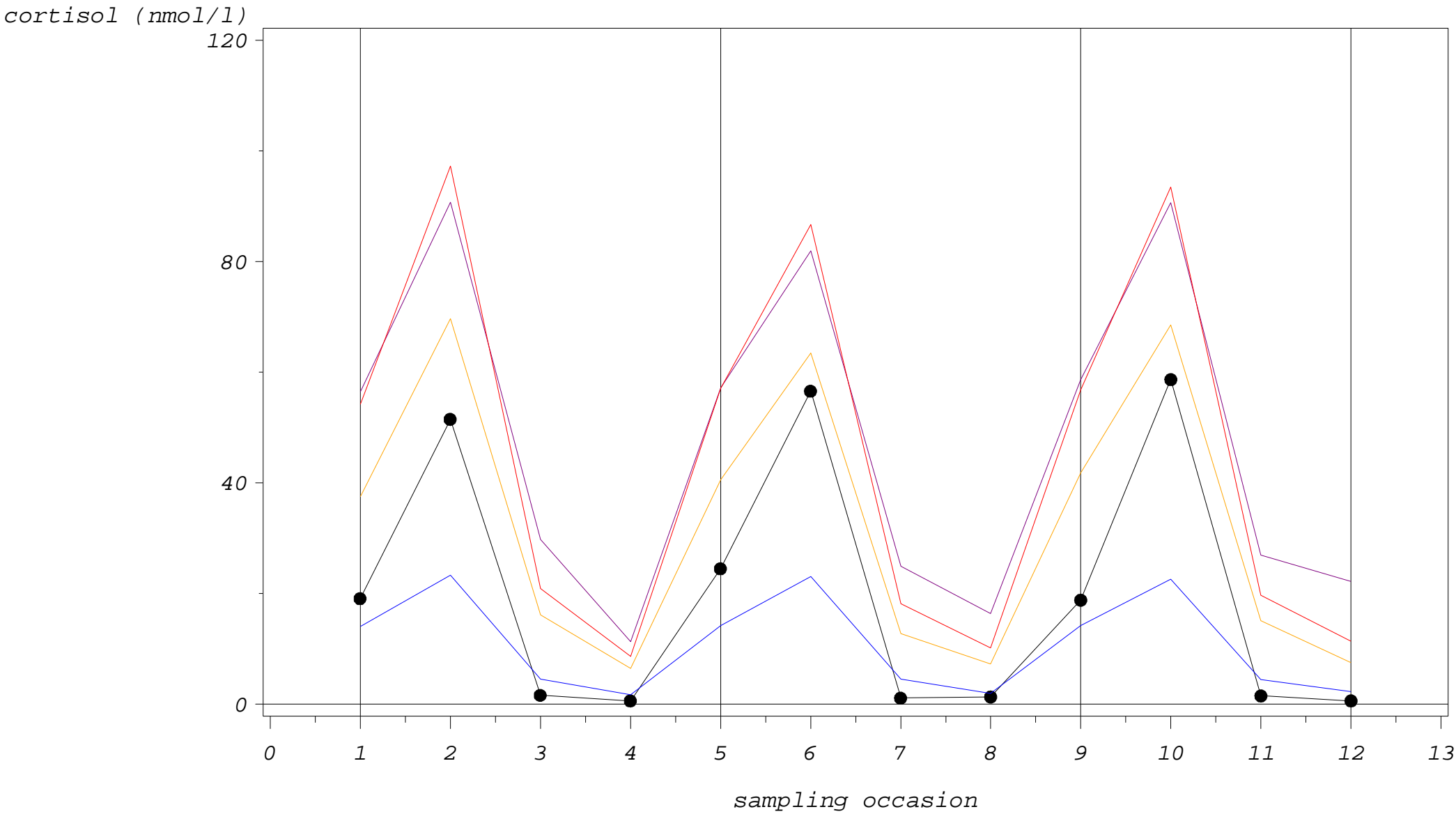
Study 2: cortisol single profiles with outlier fences

CODE=H00629



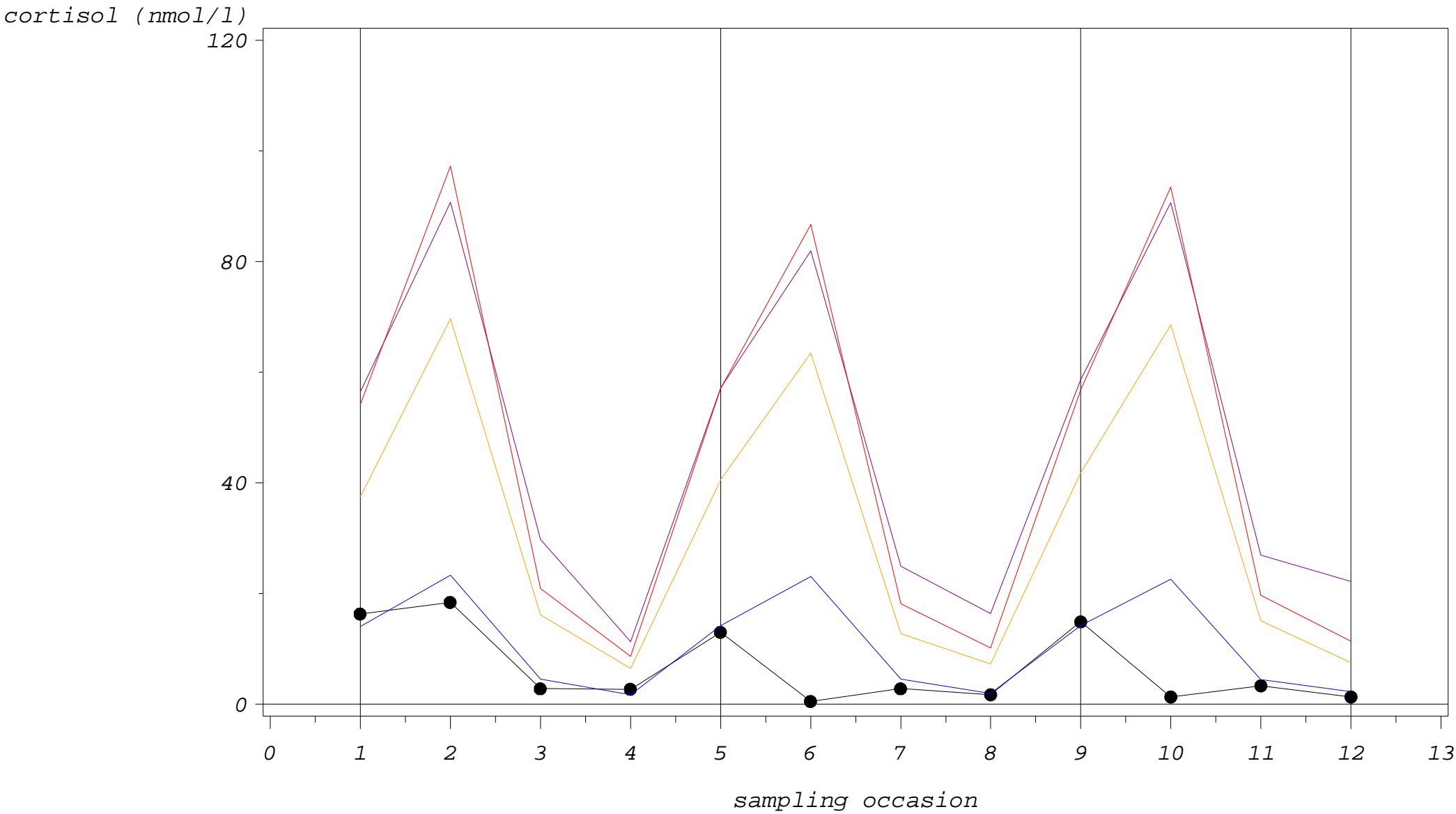
Study 2: cortisol single profiles with outlier fences

CODE=H00630



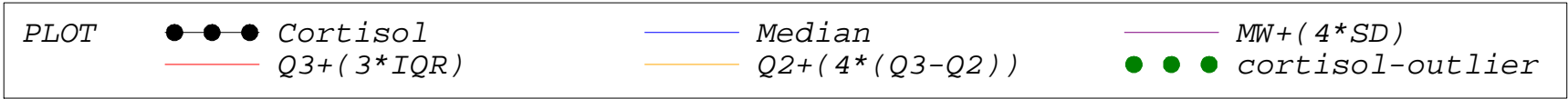
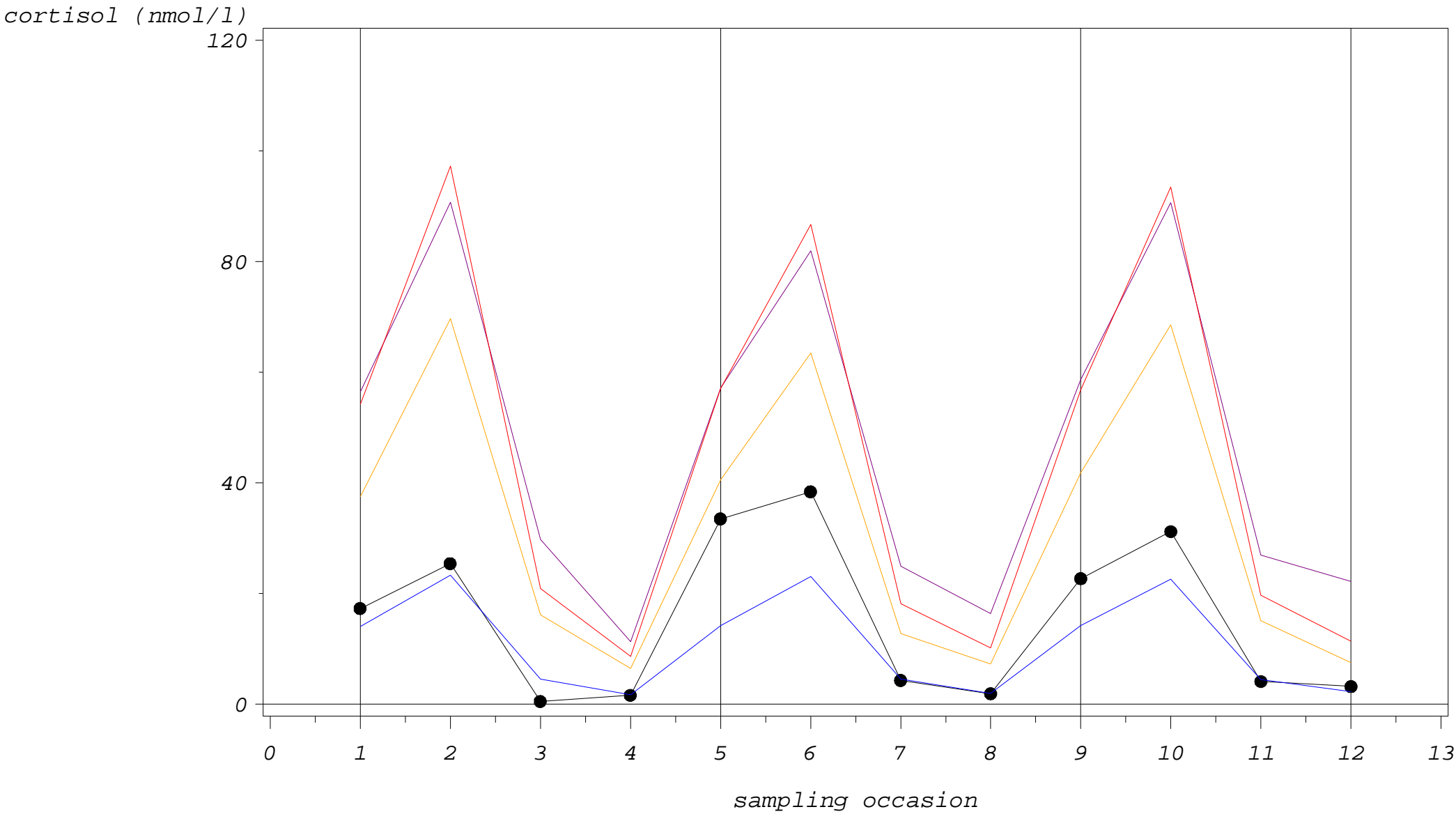
Study 2: cortisol single profiles with outlier fences

CODE=H00631



Study 2: cortisol single profiles with outlier fences

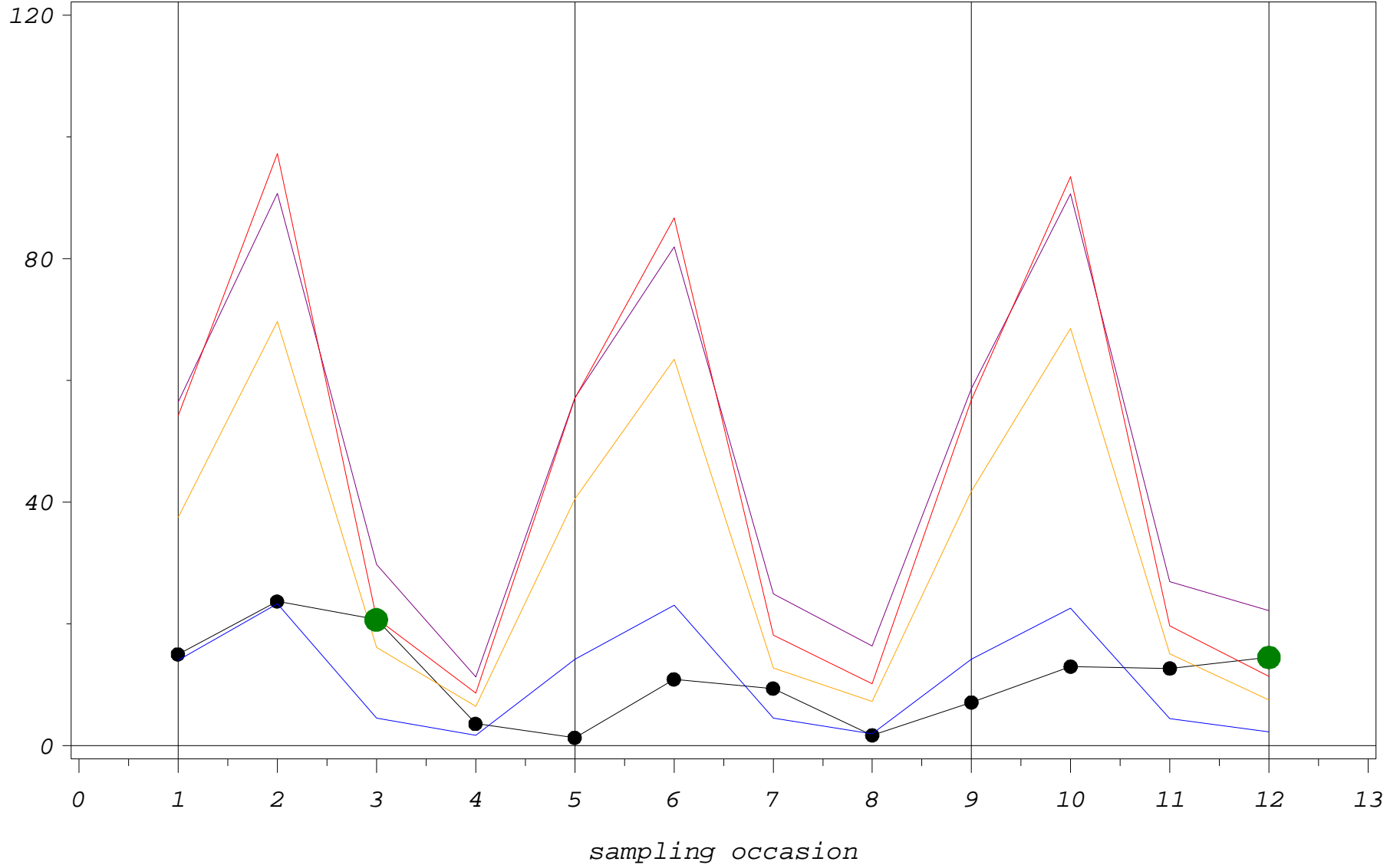
CODE=H00632



Study 2: cortisol single profiles with outlier fences

CODE=H00633

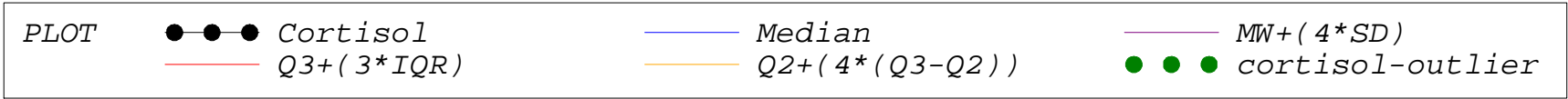
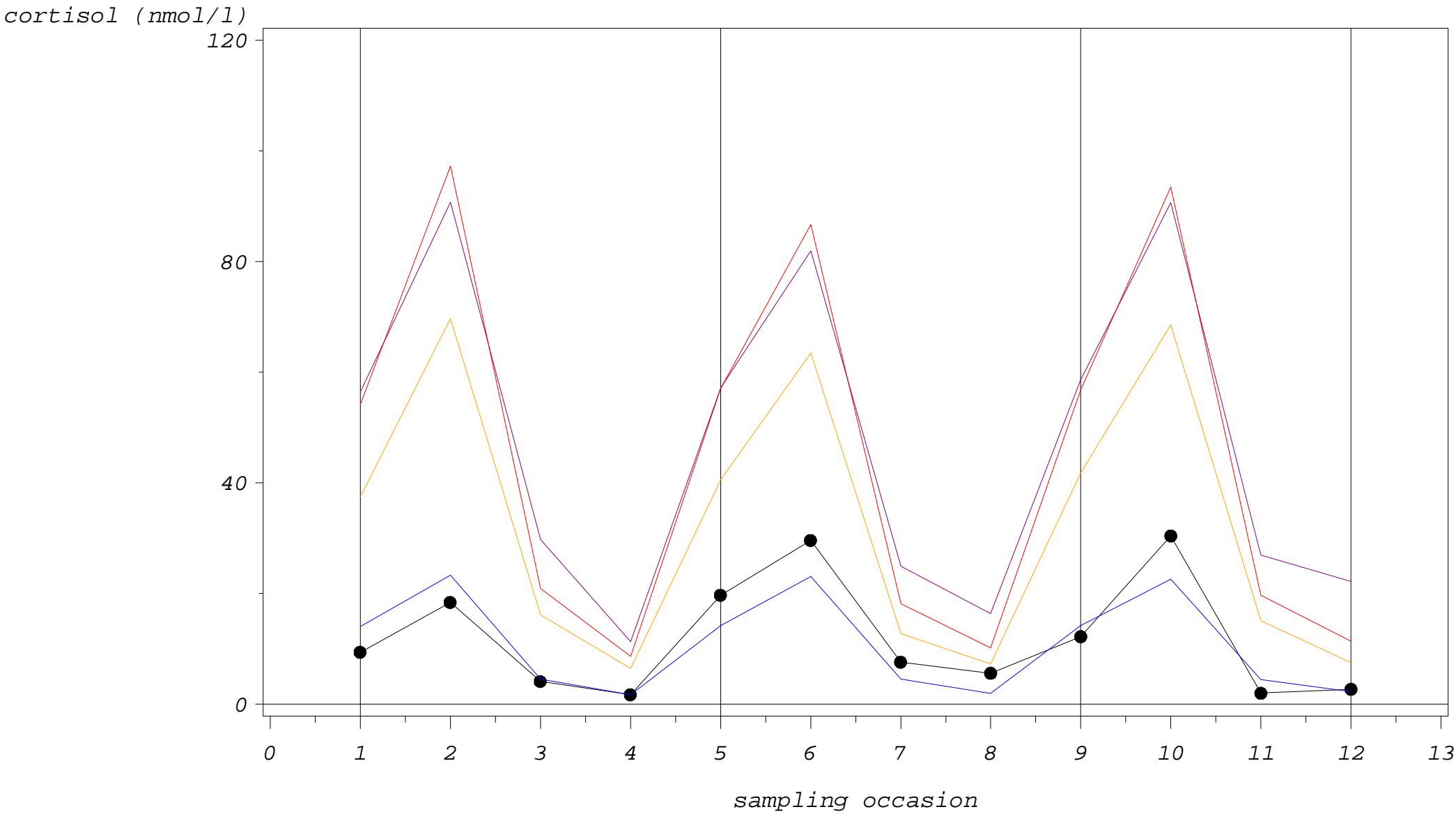
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 \cdot SD)$
 — $Q3 + (3 \cdot IQR)$ — $Q2 + (4 \cdot (Q3 - Q2))$ ● ● ● cortisol-outlier

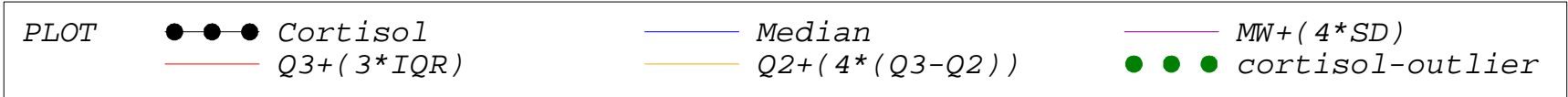
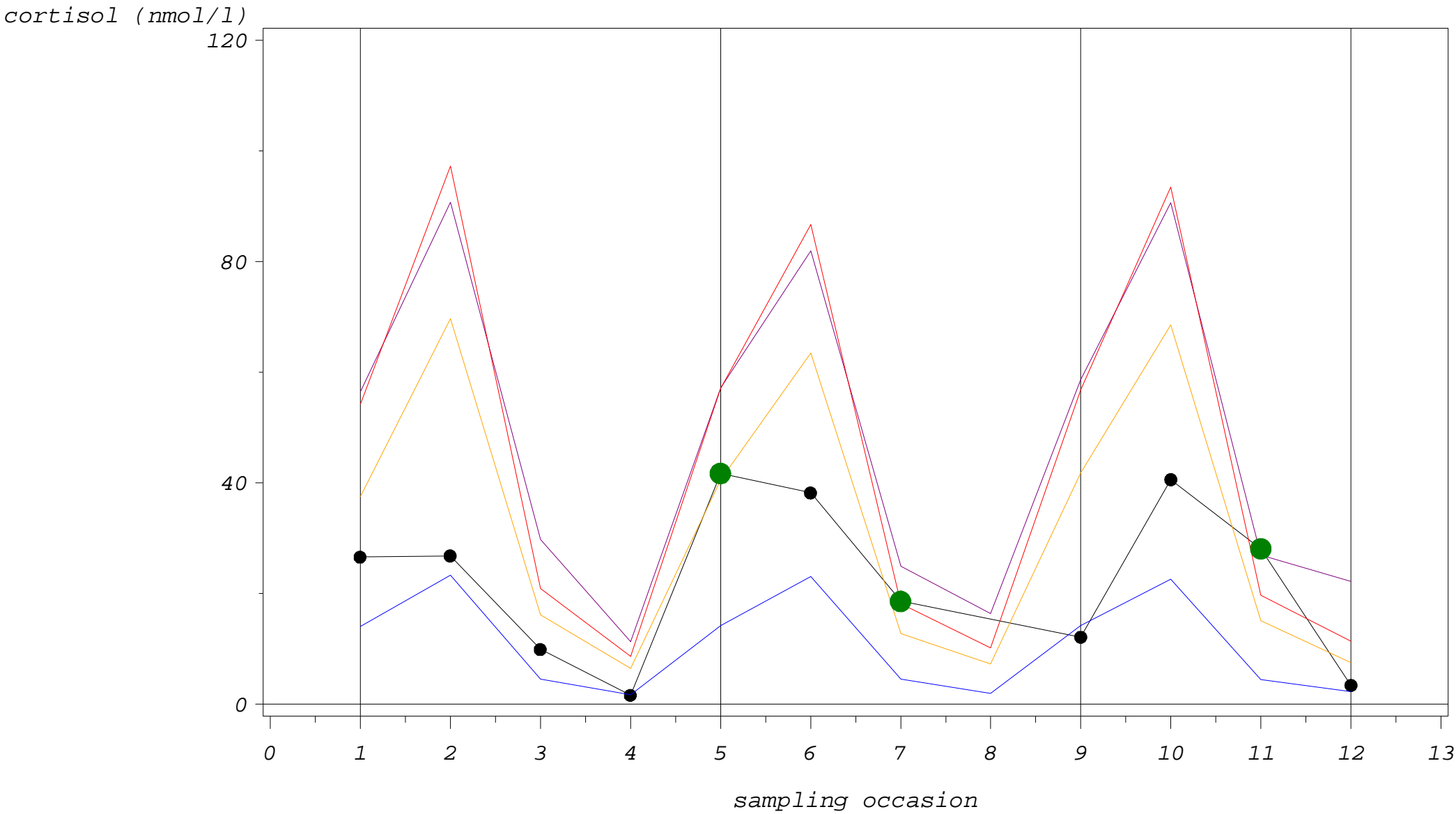
Study 2: cortisol single profiles with outlier fences

CODE=H00634



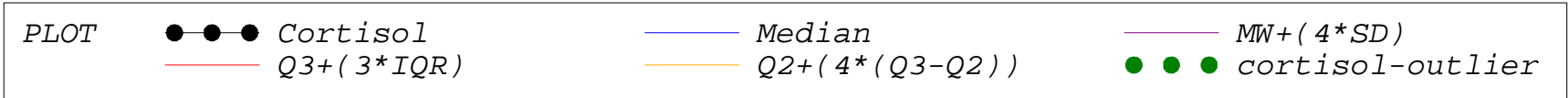
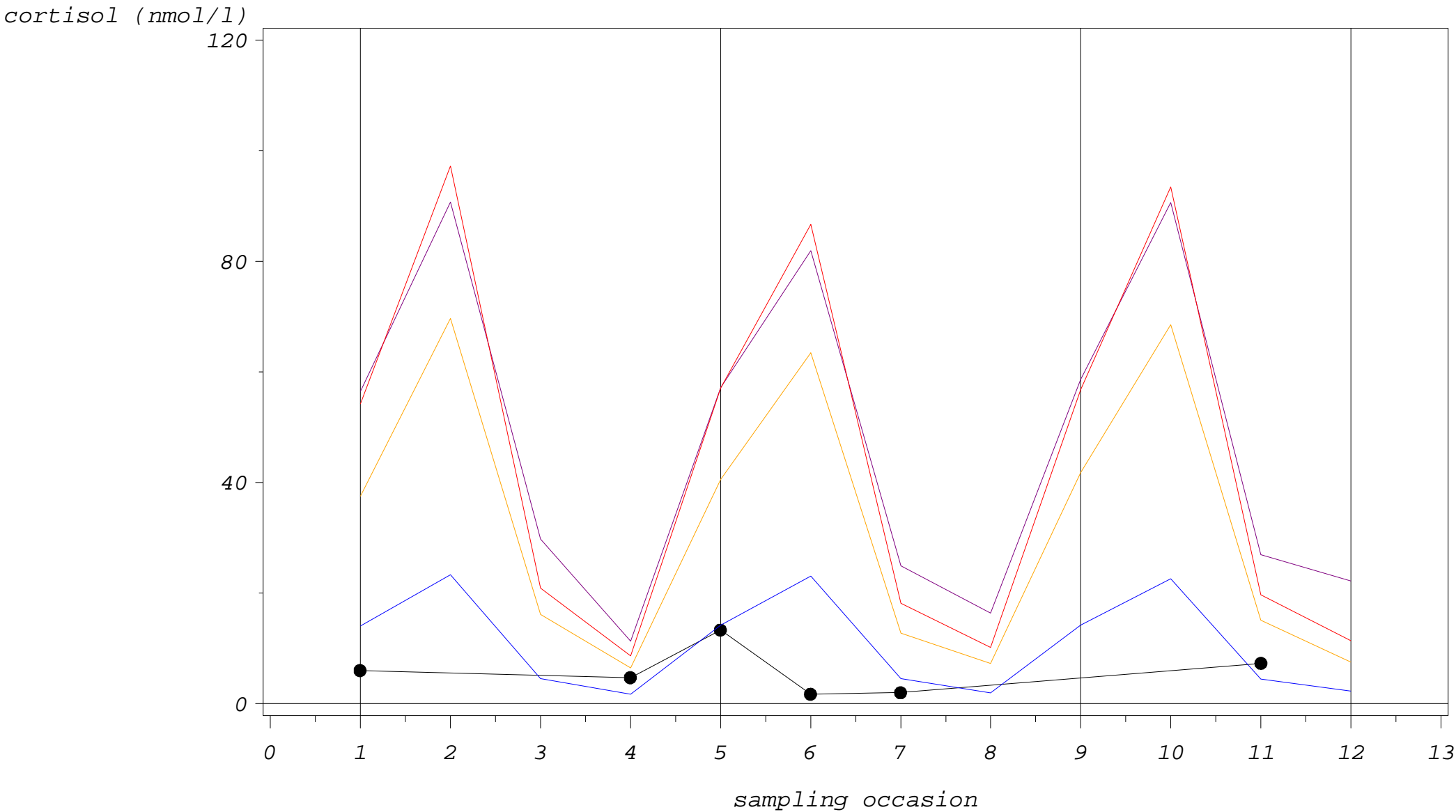
Study 2: cortisol single profiles with outlier fences

CODE=H00635



Study 2: cortisol single profiles with outlier fences

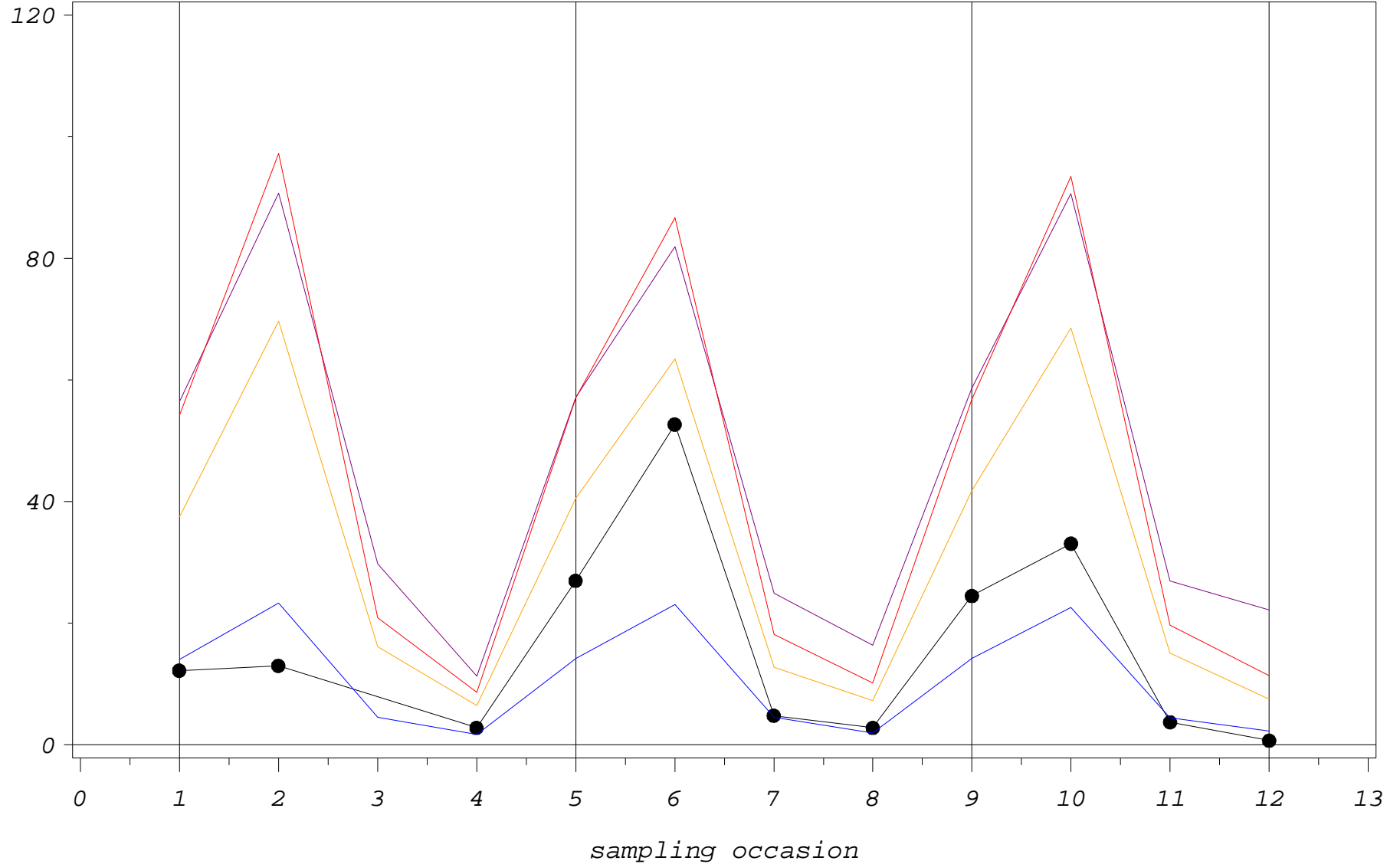
CODE=H00636



Study 2: cortisol single profiles with outlier fences

CODE=H00637

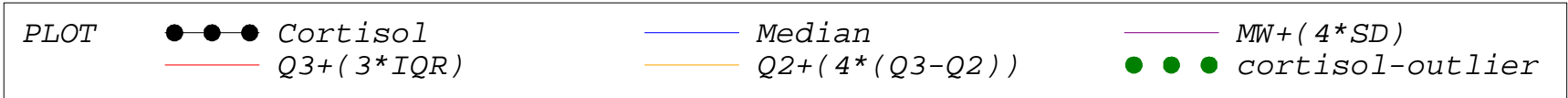
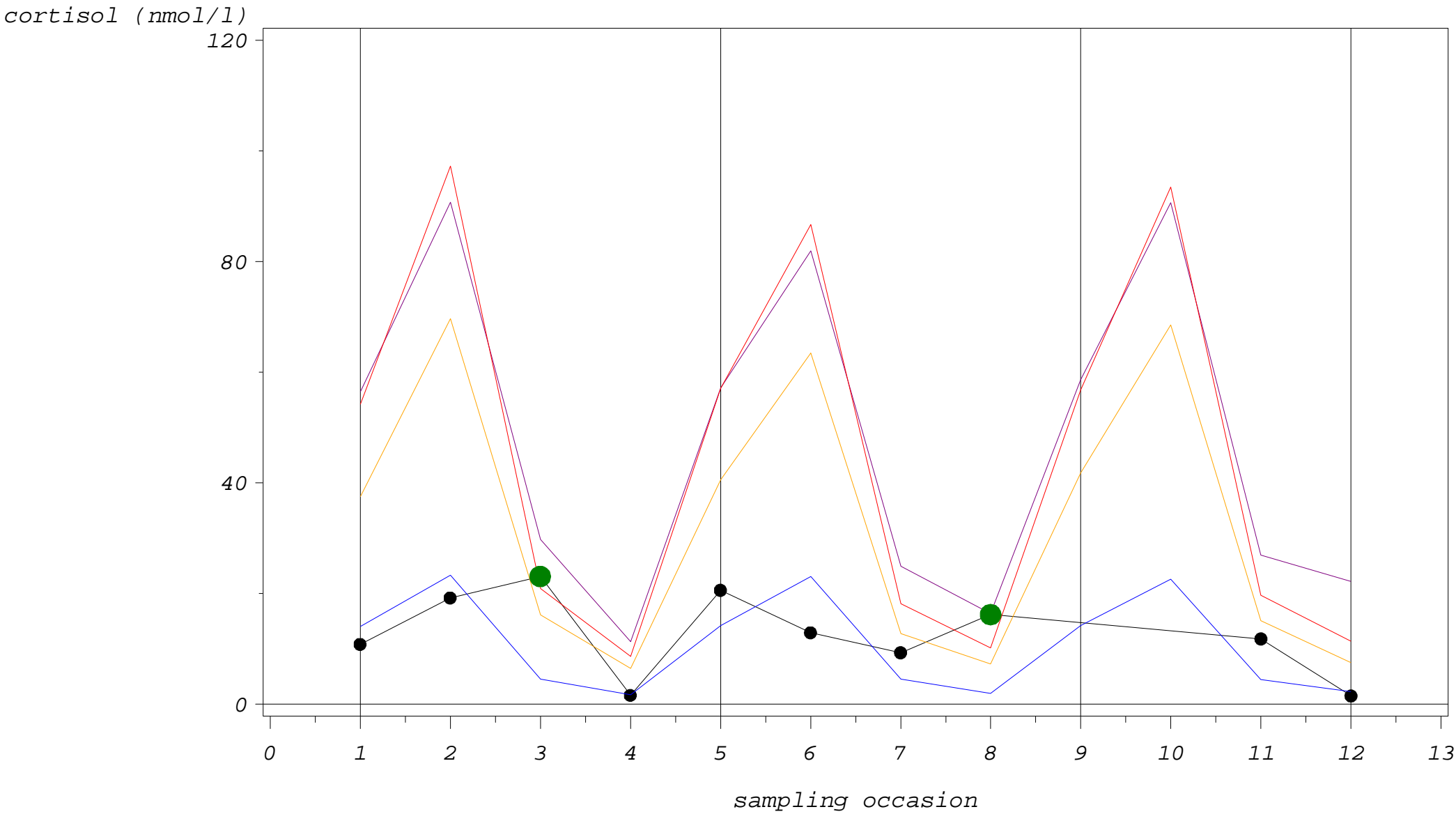
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ●●● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

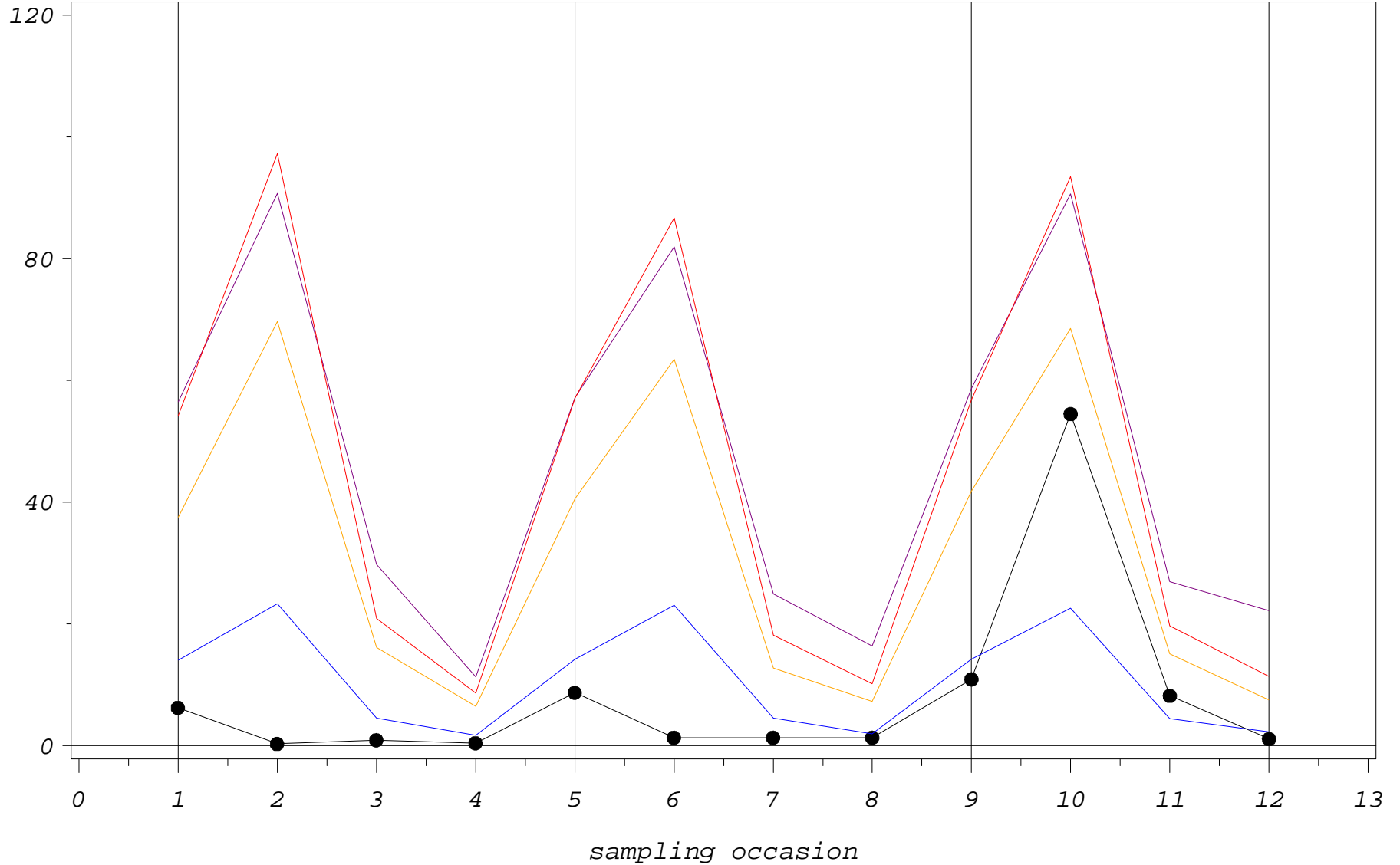
CODE=H00638



Study 2: cortisol single profiles with outlier fences

CODE=H00639

cortisol (nmol/l)

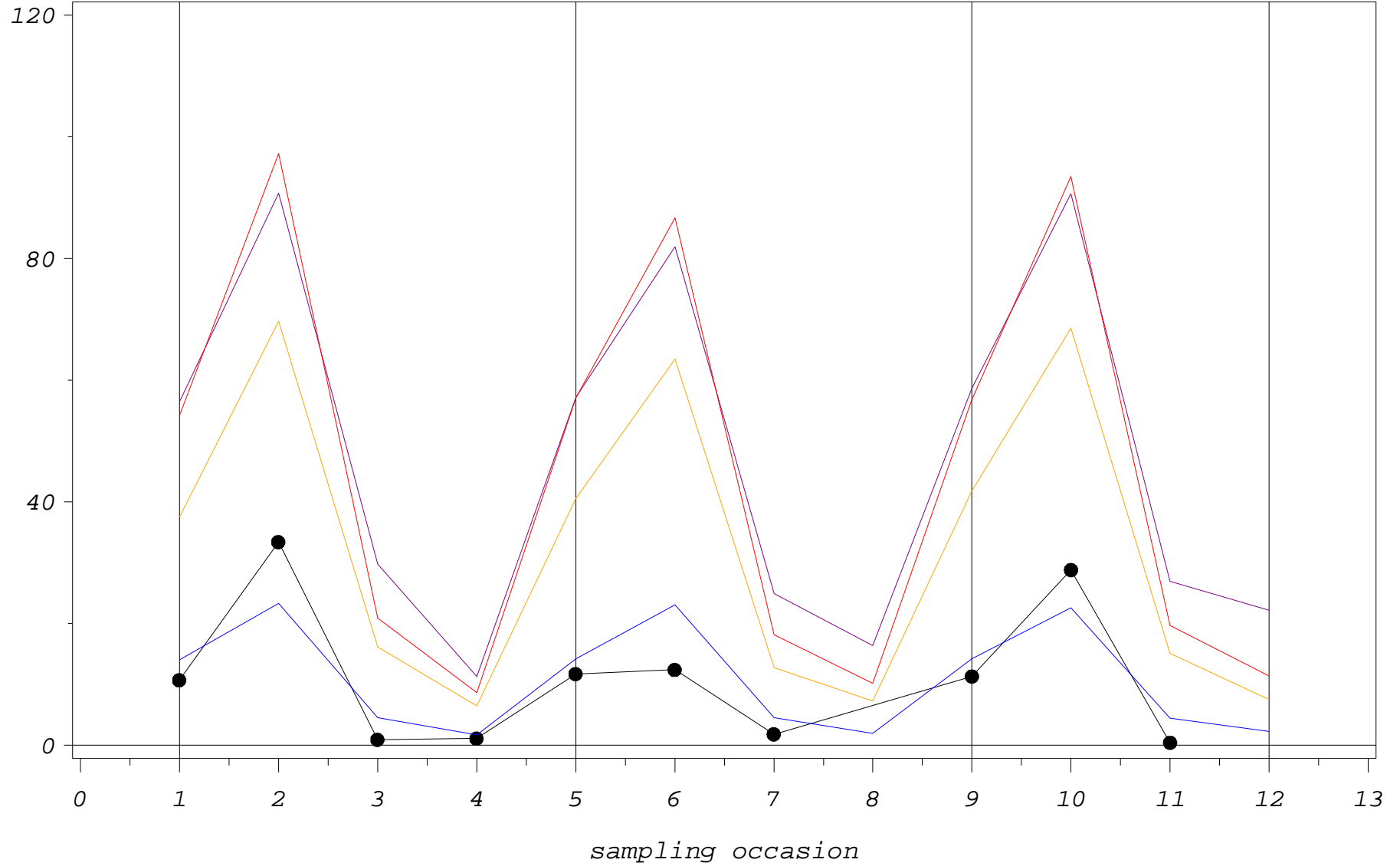


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H00640

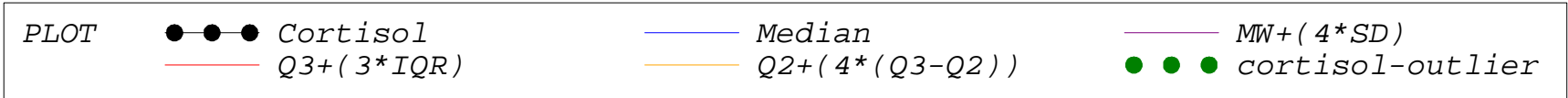
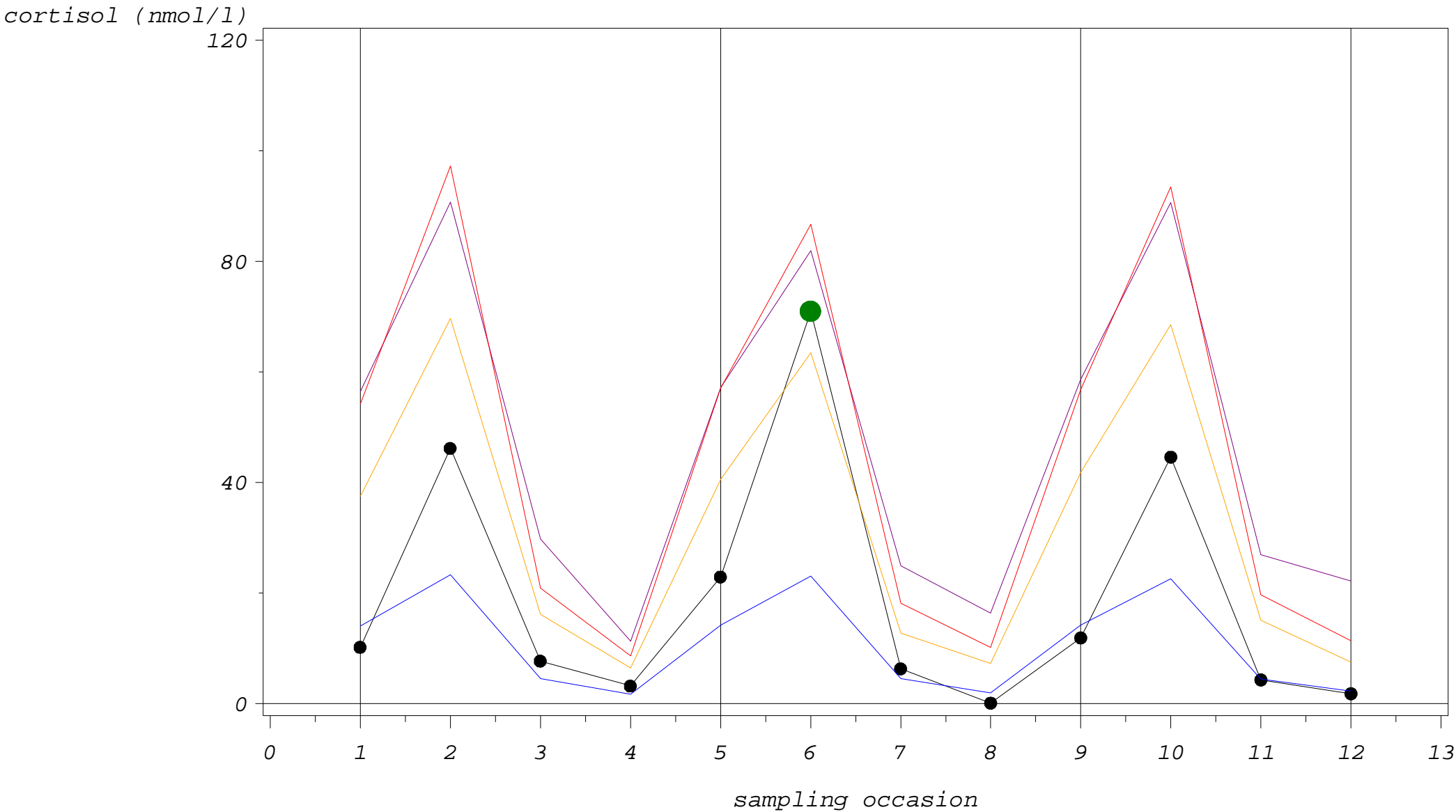
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 \times SD)$
 — $Q3 + (3 \times IQR)$ — $Q2 + (4 \times (Q3 - Q2))$ ● ● ● cortisol-outlier

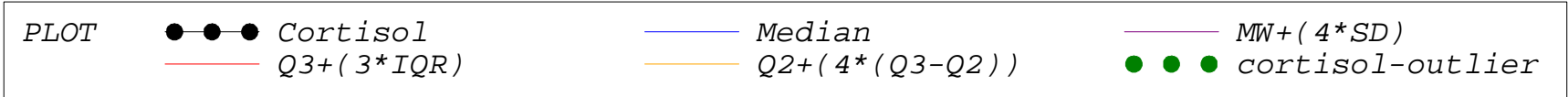
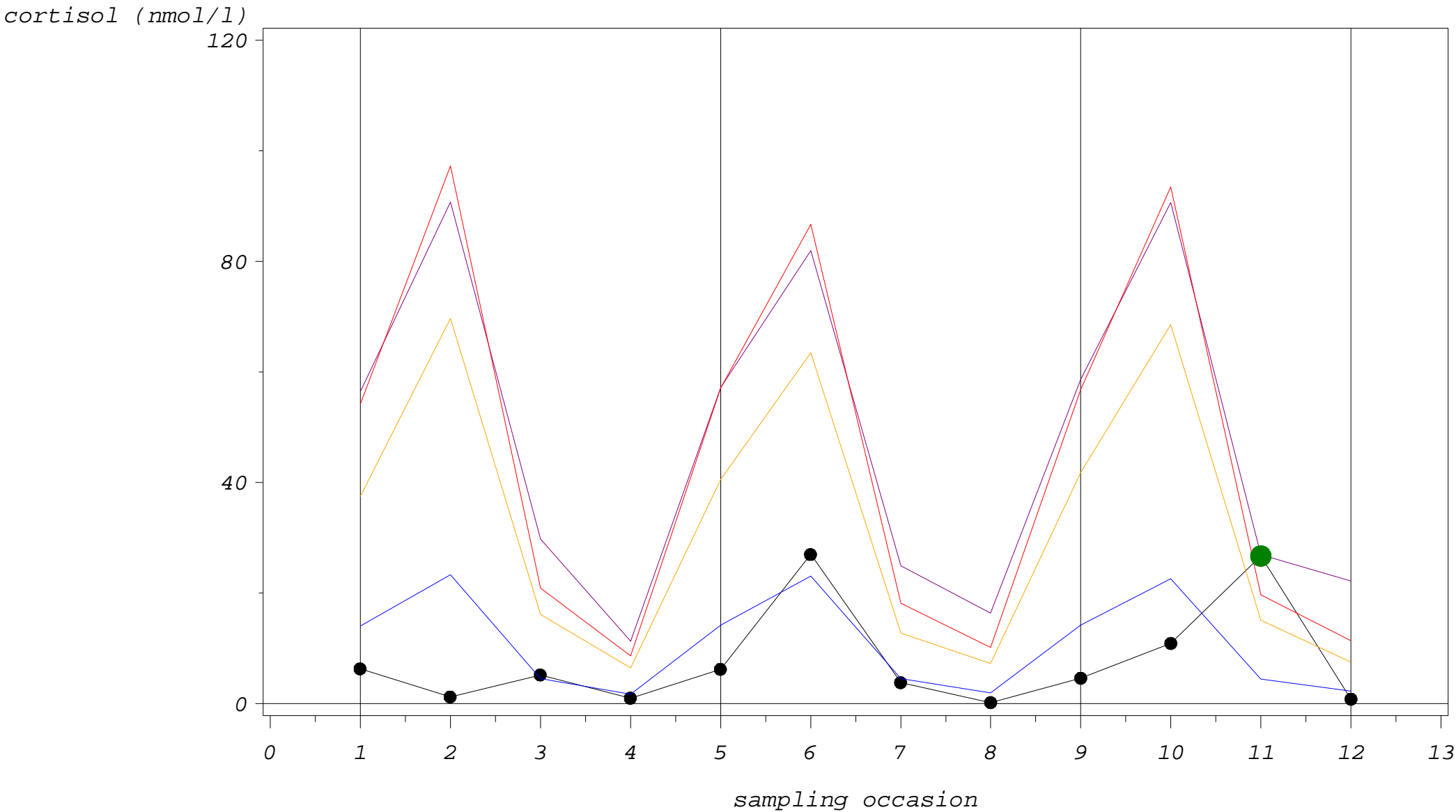
Study 2: cortisol single profiles with outlier fences

CODE=H00642



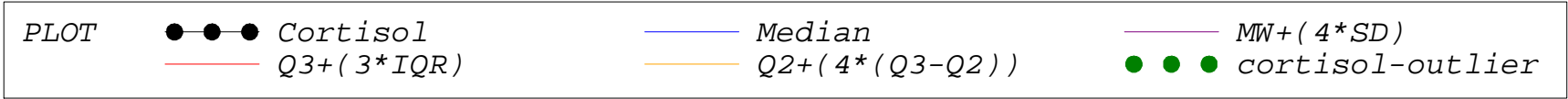
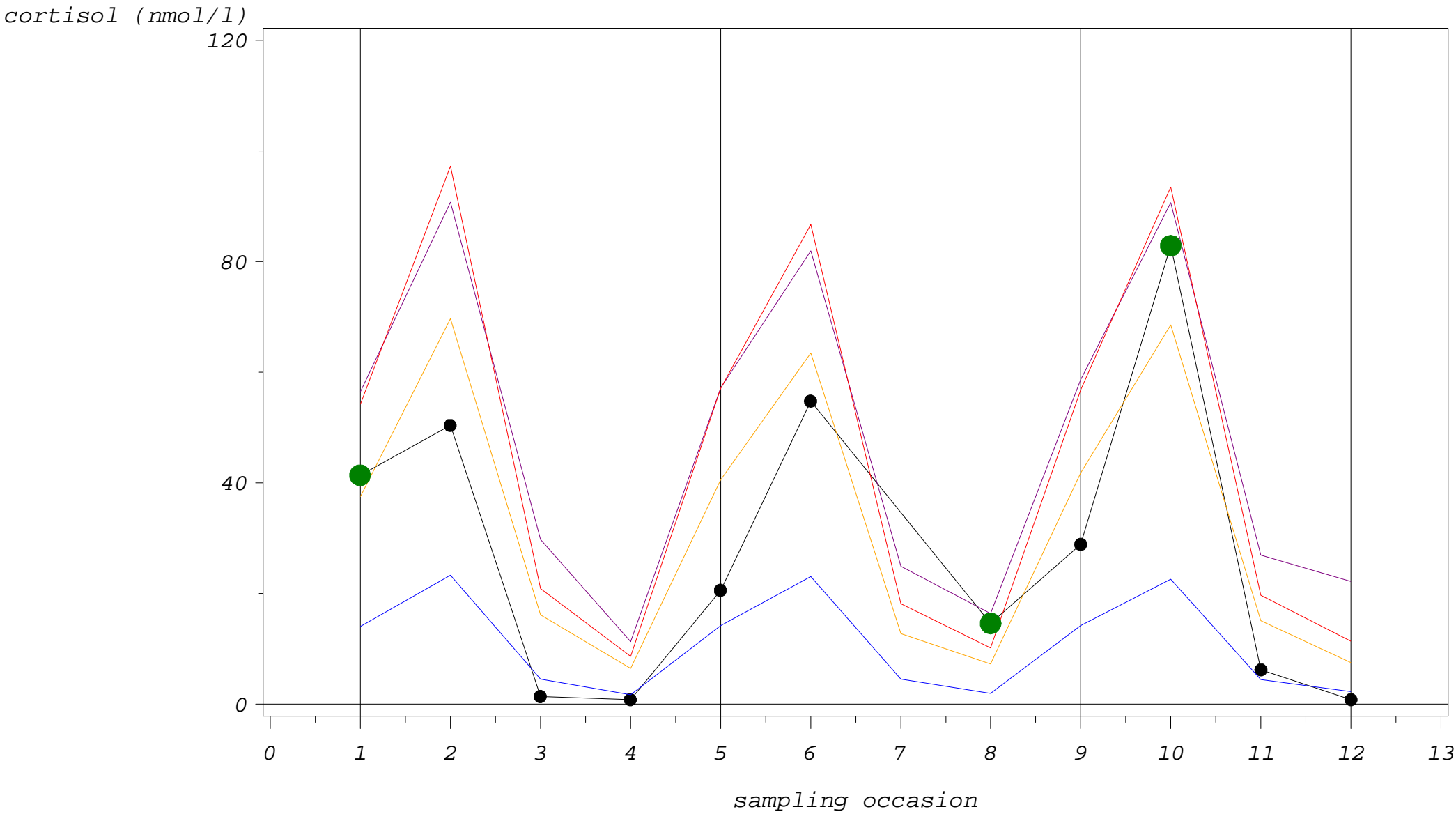
Study 2: cortisol single profiles with outlier fences

CODE=H00644



Study 2: cortisol single profiles with outlier fences

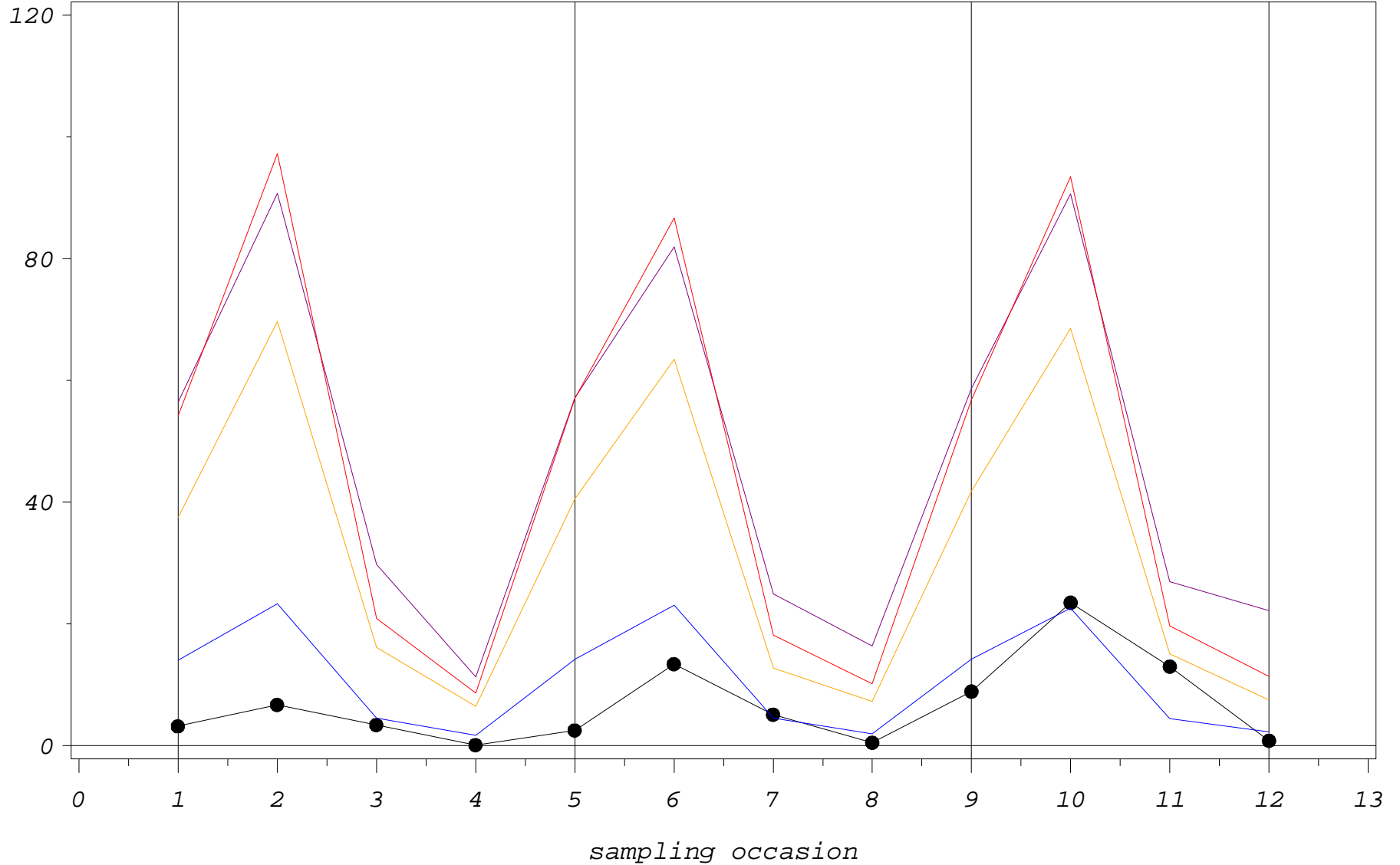
CODE=H00645



Study 2: cortisol single profiles with outlier fences

CODE=H00646

cortisol (nmol/l)

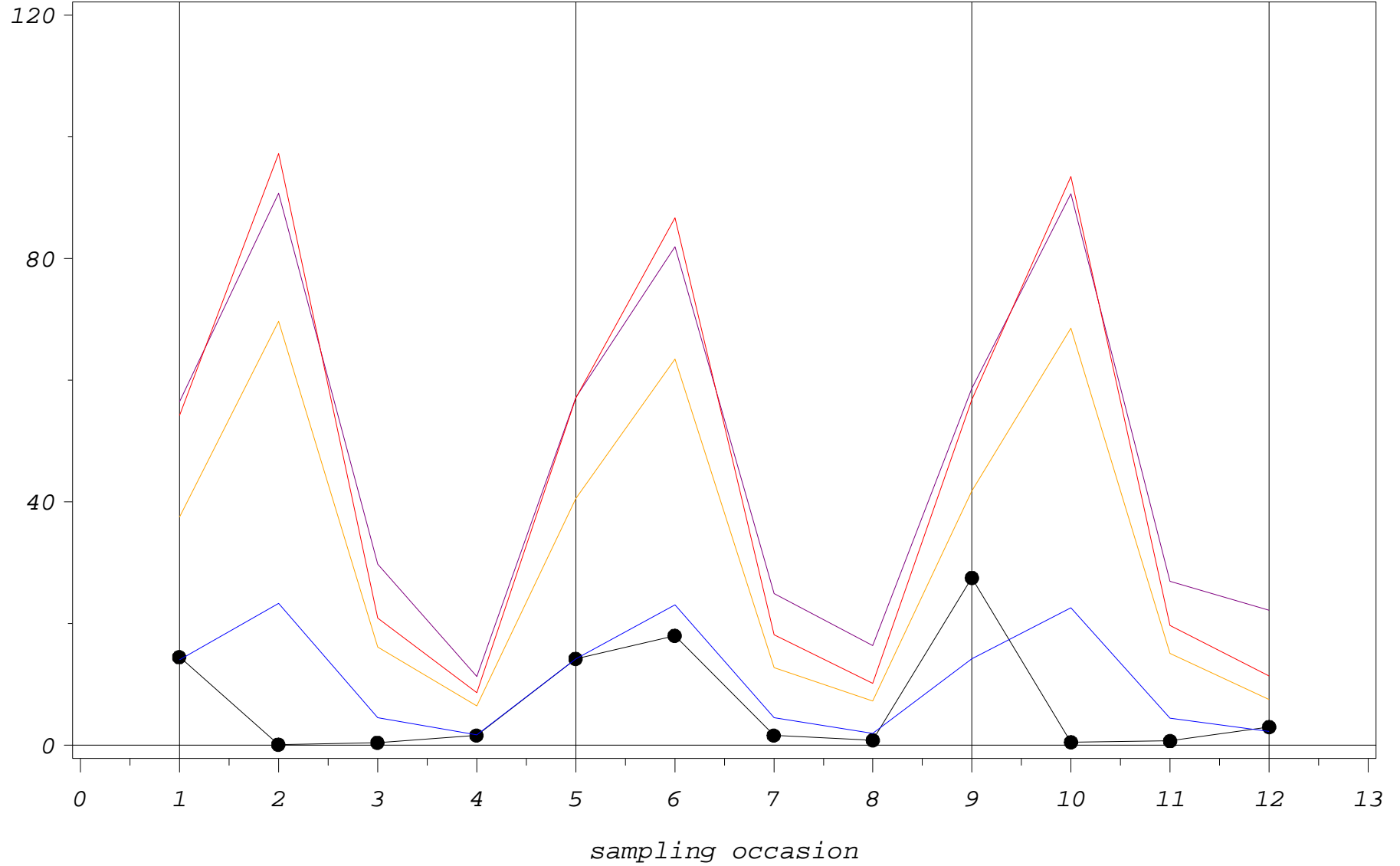


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H00647

cortisol (nmol/l)

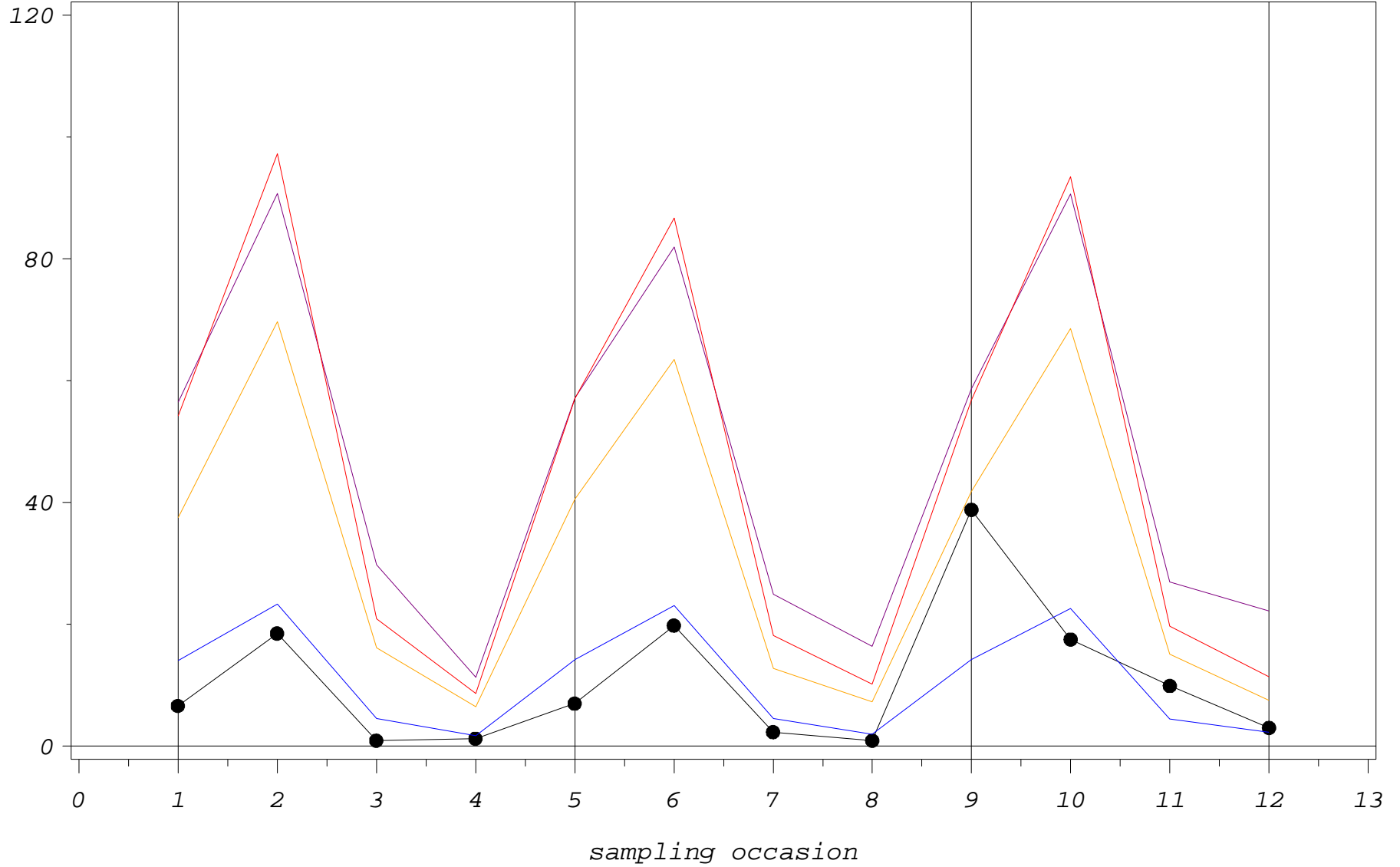


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ●●● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H00648

cortisol (nmol/l)



PLOT

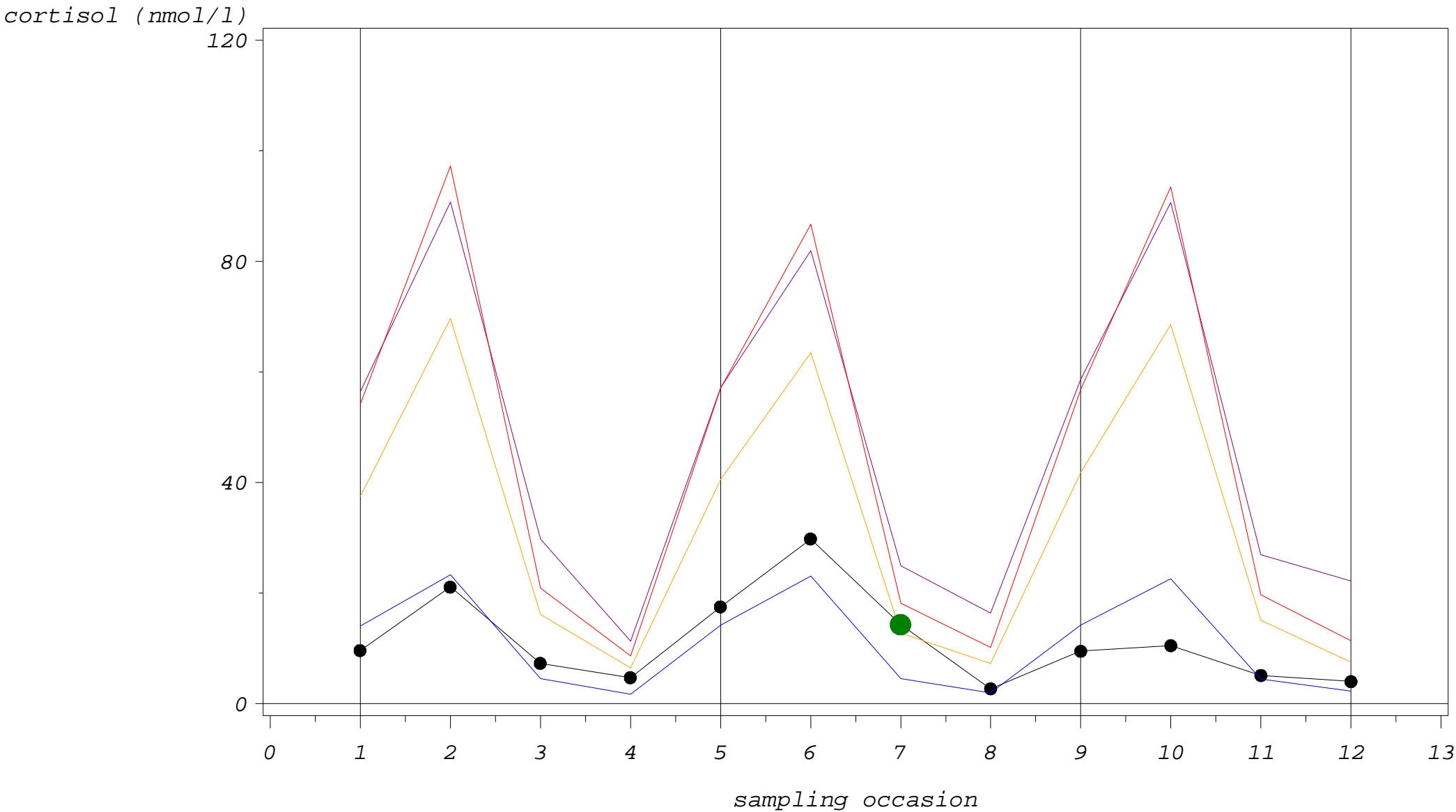
●—● Cortisol
— Q3+(3*IQR)

— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
●●● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

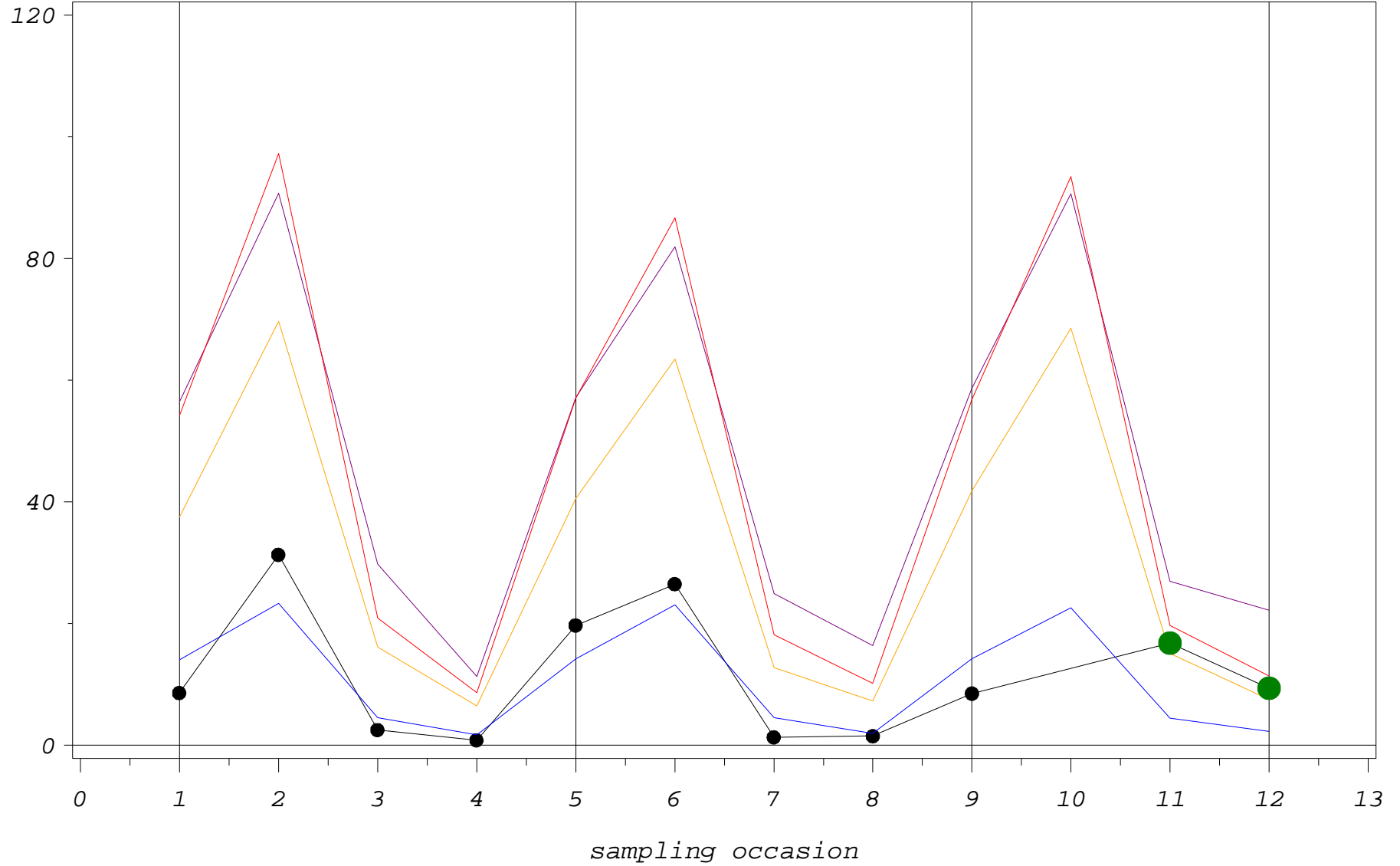
CODE=H00661



Study 2: cortisol single profiles with outlier fences

CODE=H00673

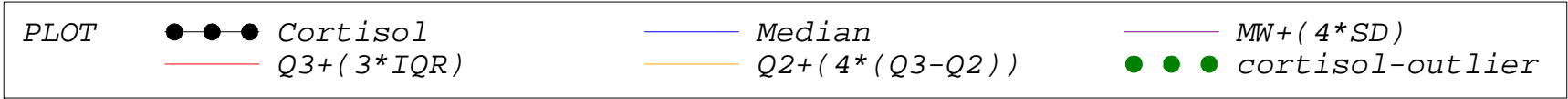
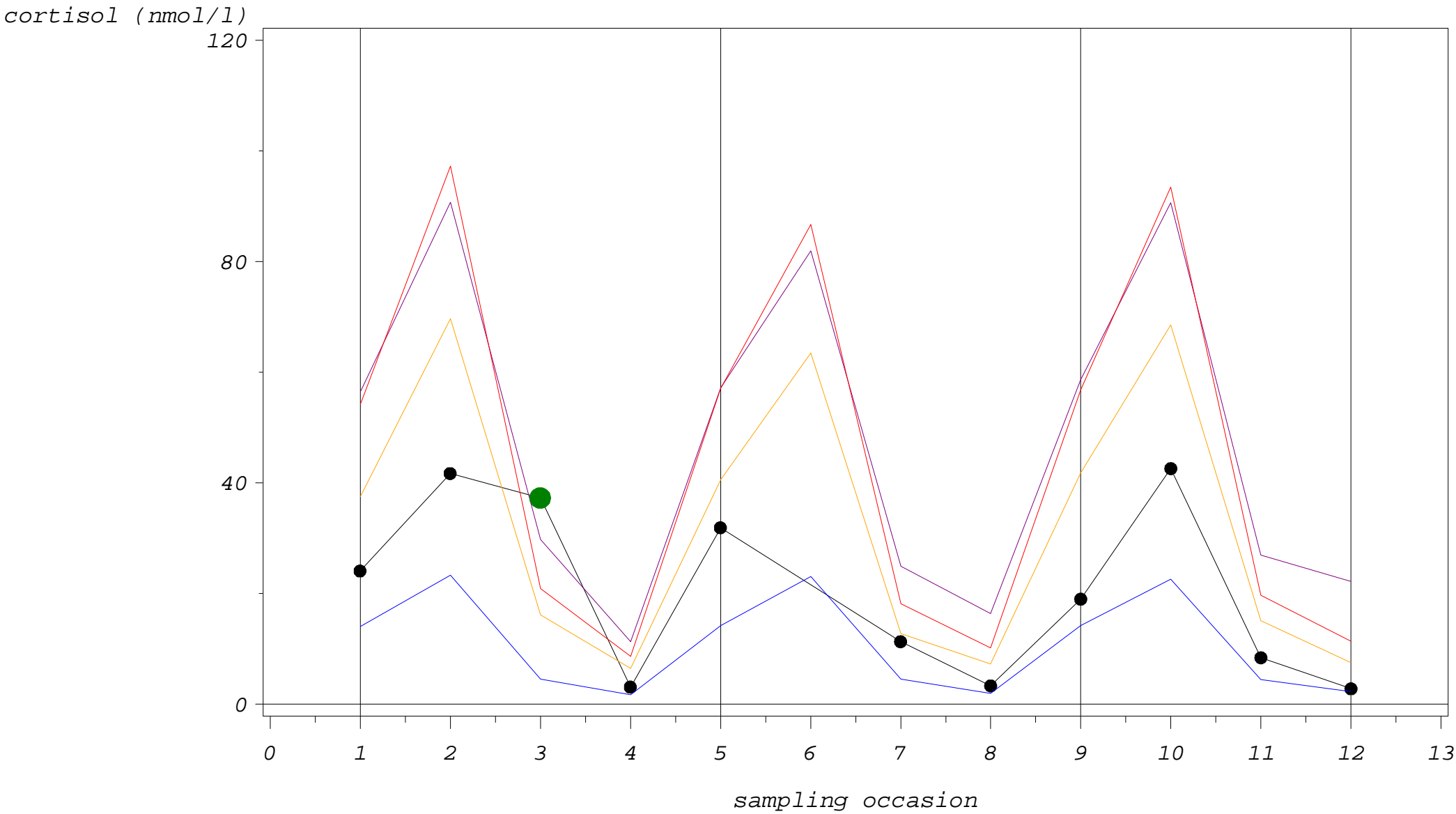
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

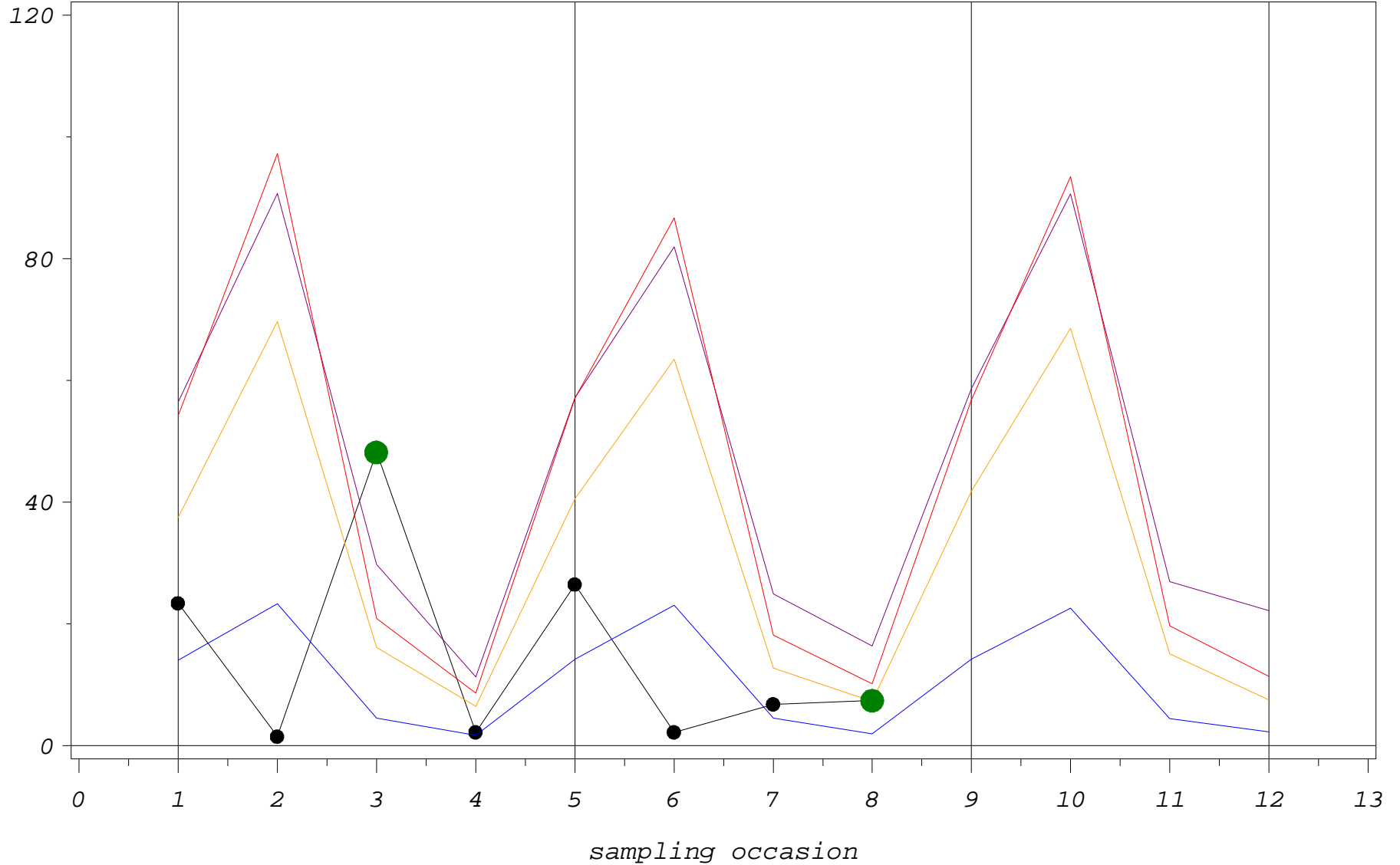
CODE=H00685



Study 2: cortisol single profiles with outlier fences

CODE=H00697

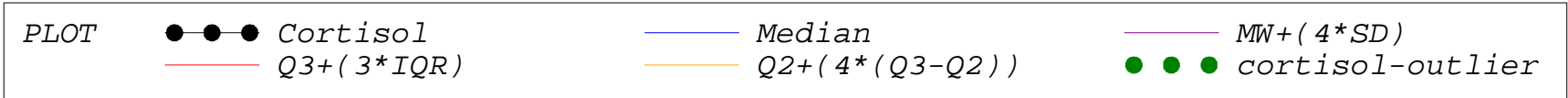
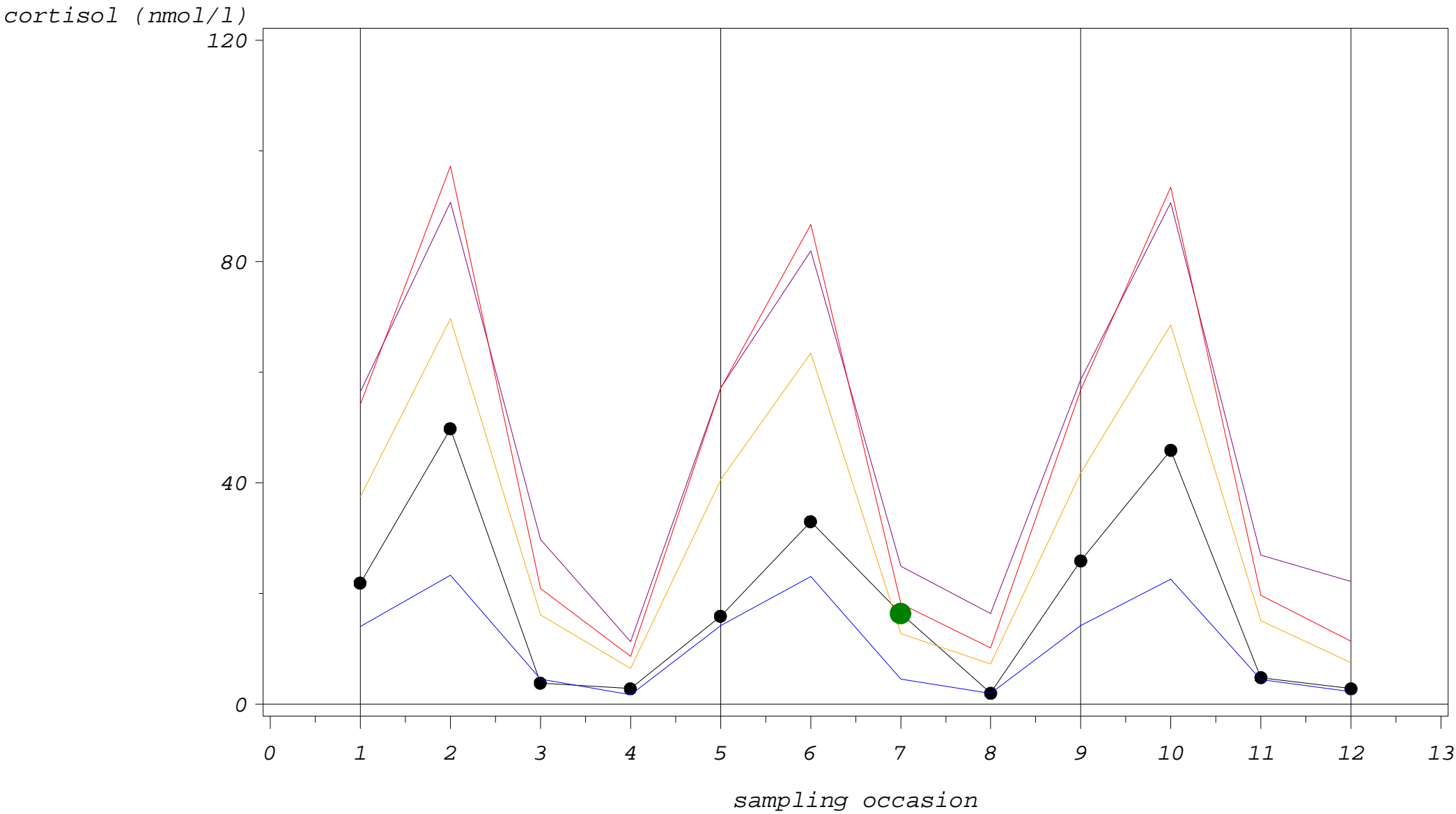
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 \cdot SD)$
 — $Q3 + (3 \cdot IQR)$ — $Q2 + (4 \cdot (Q3 - Q2))$ ● ● ● cortisol-outlier

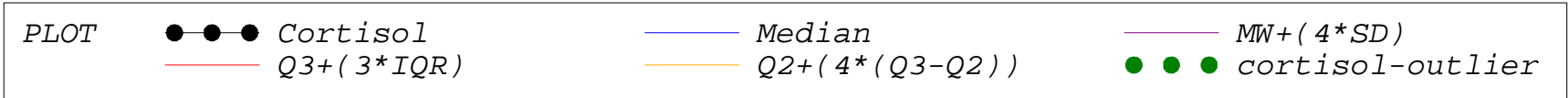
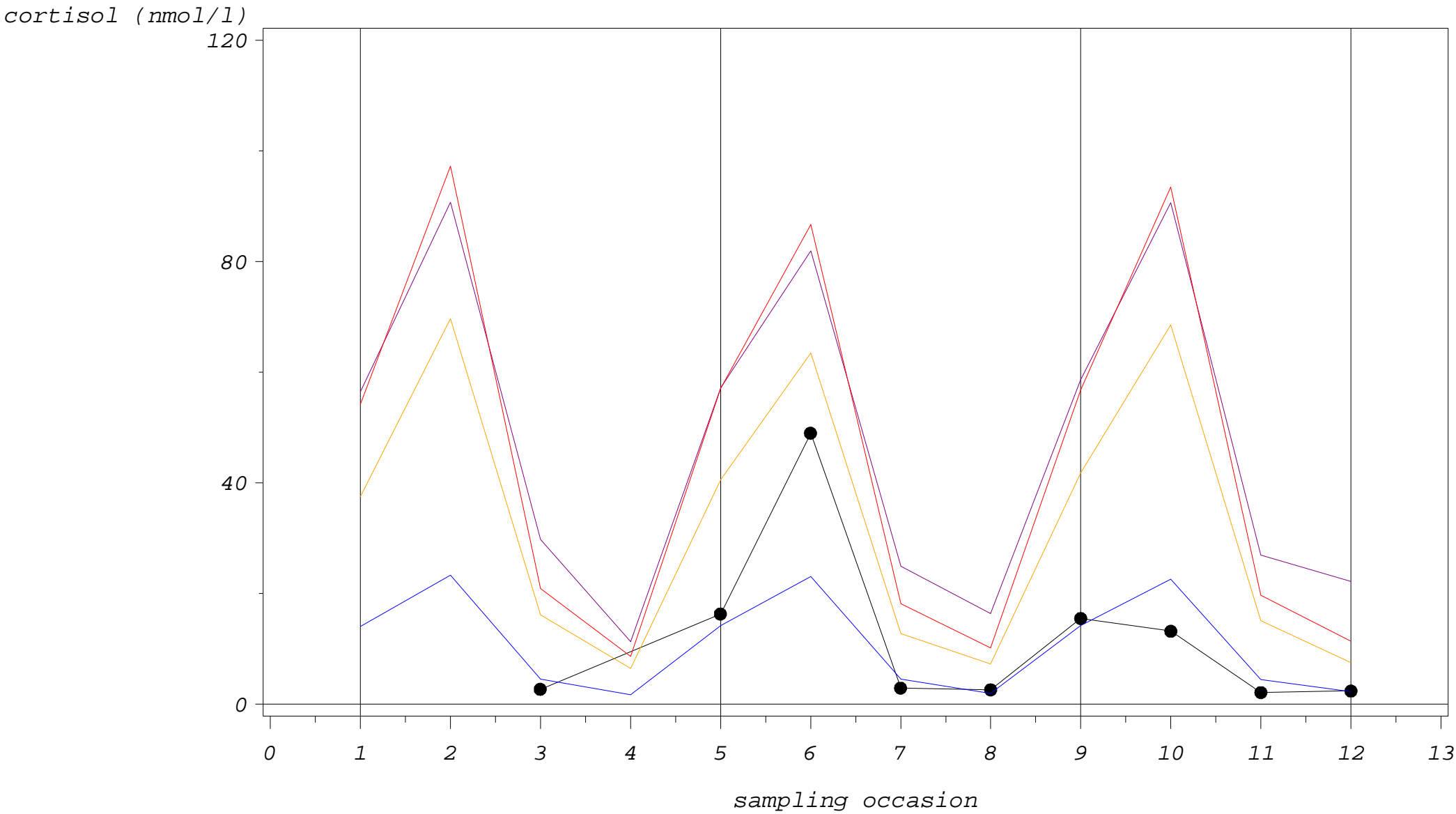
Study 2: cortisol single profiles with outlier fences

CODE=H00801



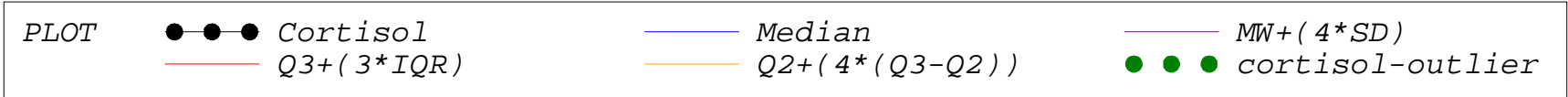
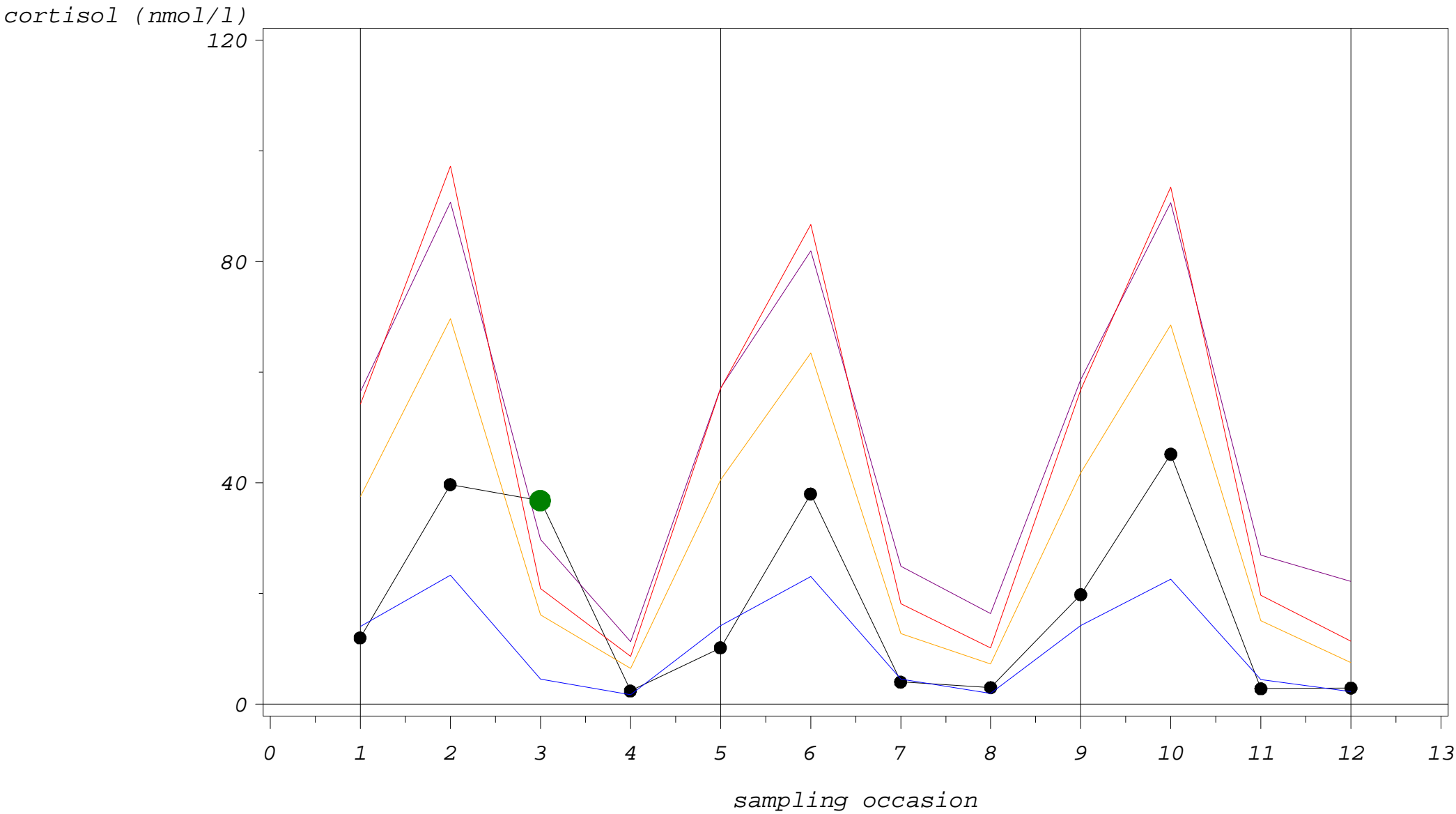
Study 2: cortisol single profiles with outlier fences

CODE=H00802



Study 2: cortisol single profiles with outlier fences

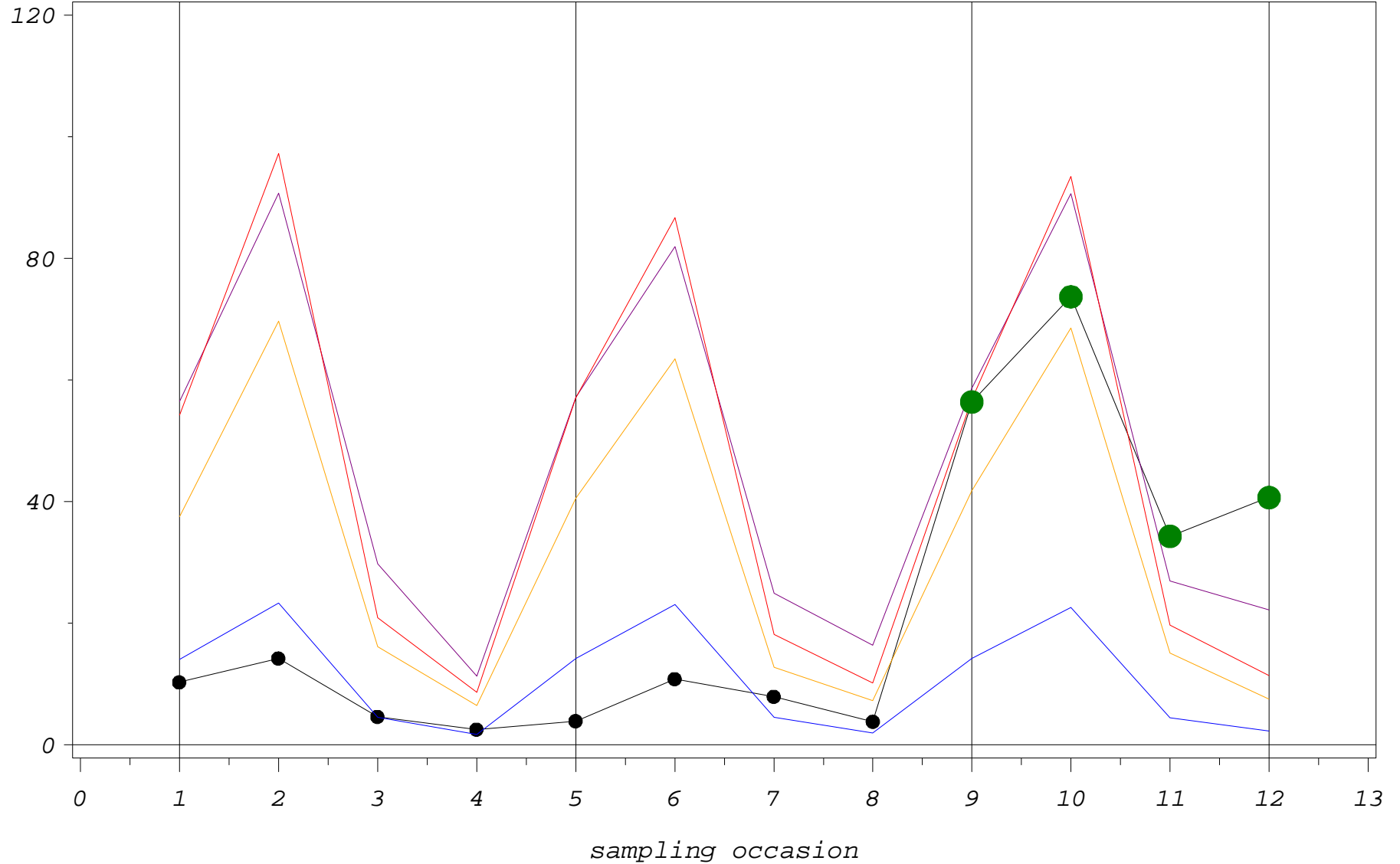
CODE=H00803



Study 2: cortisol single profiles with outlier fences

CODE=H00805

cortisol (nmol/l)

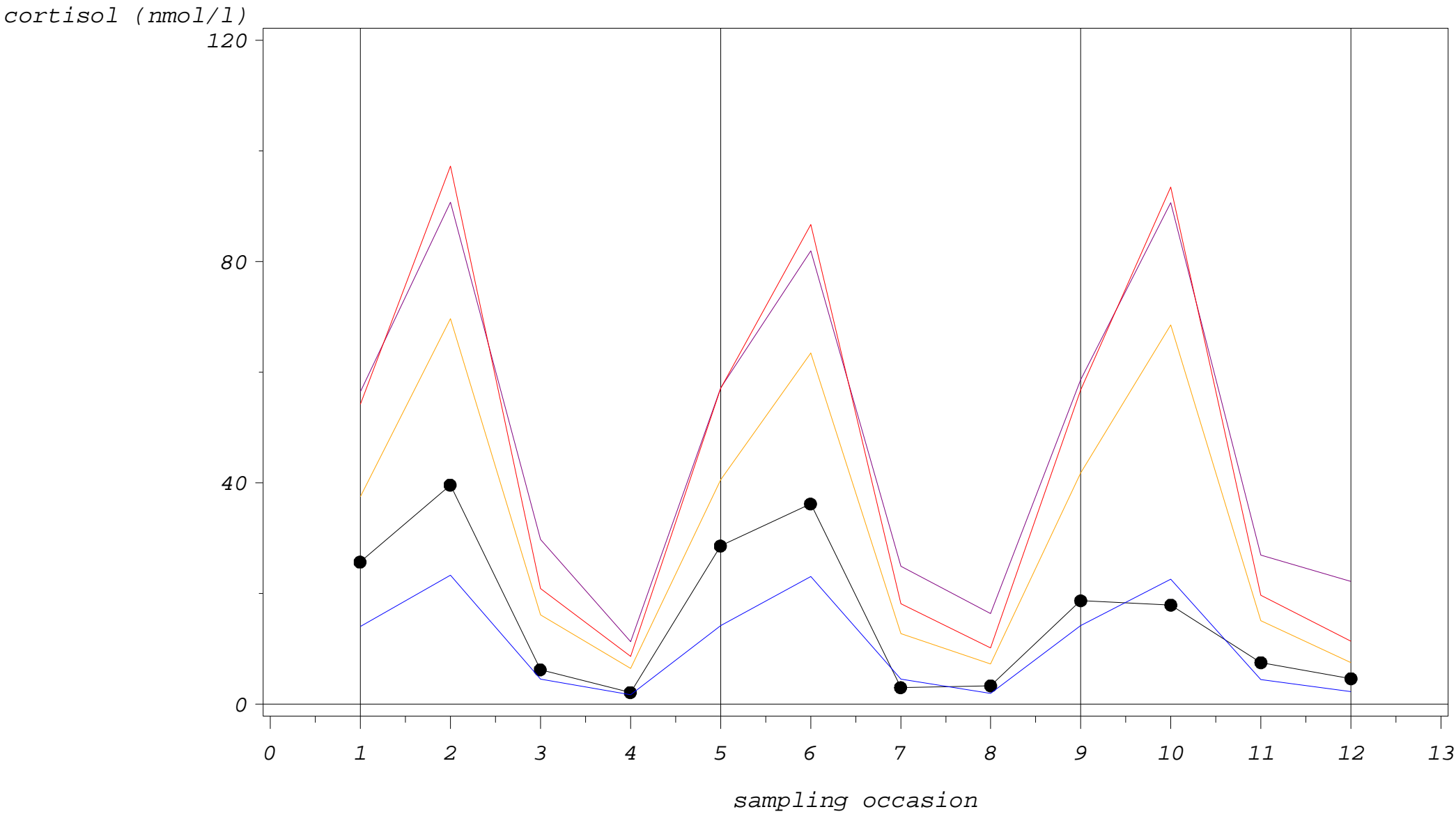


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●—●—●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

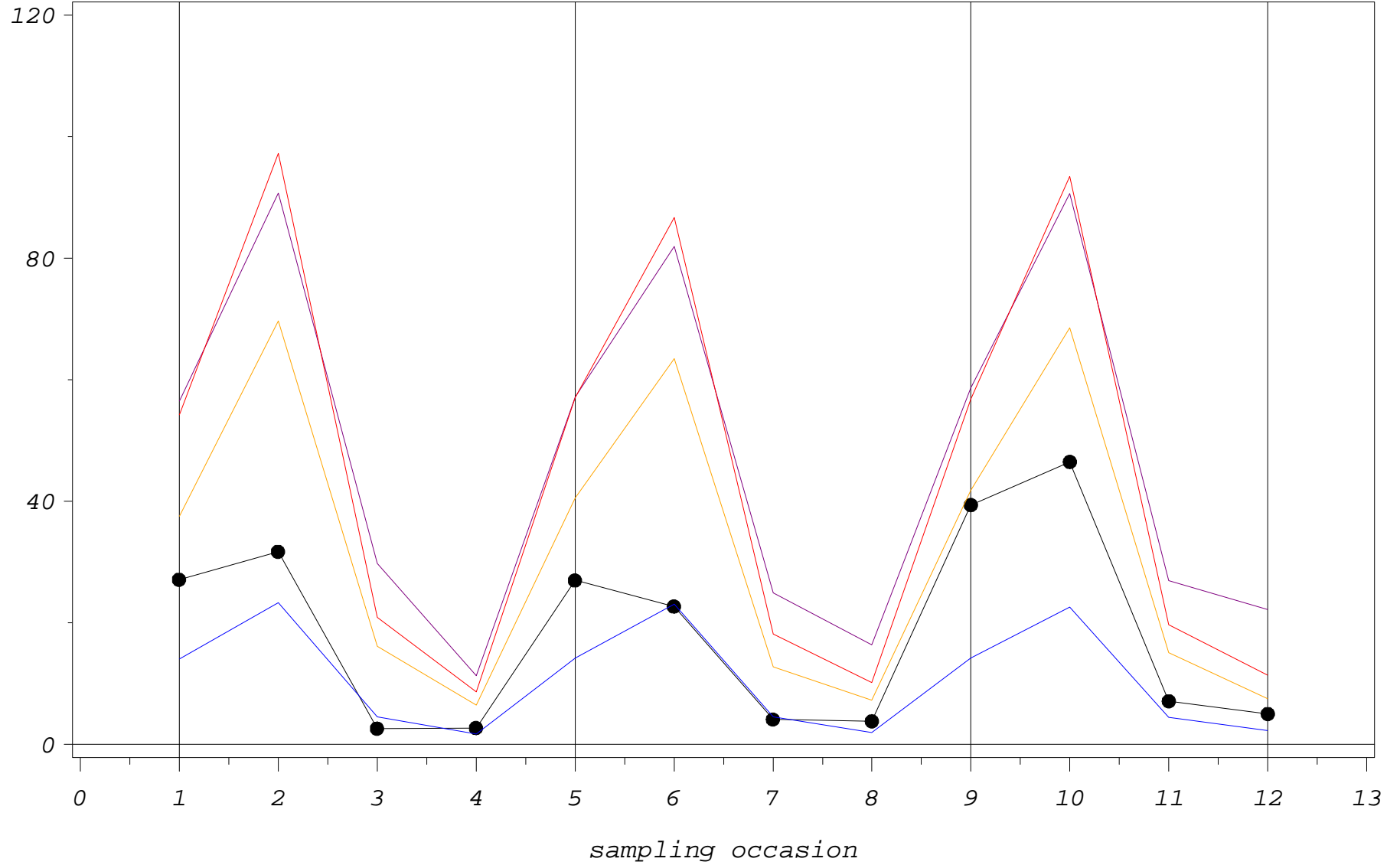
CODE=H00806



Study 2: cortisol single profiles with outlier fences

CODE=H00807

cortisol (nmol/l)

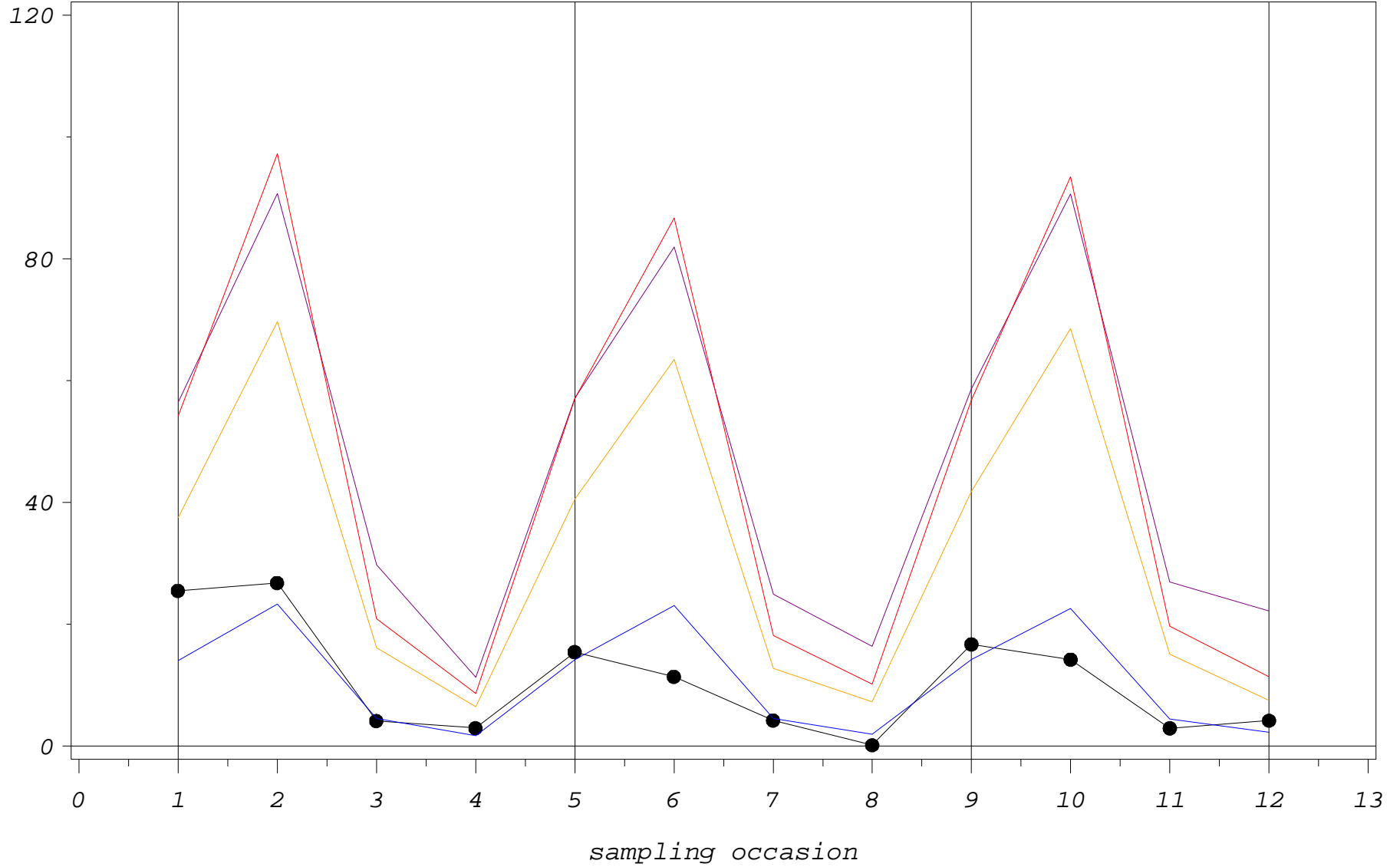


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H00901

cortisol (nmol/l)

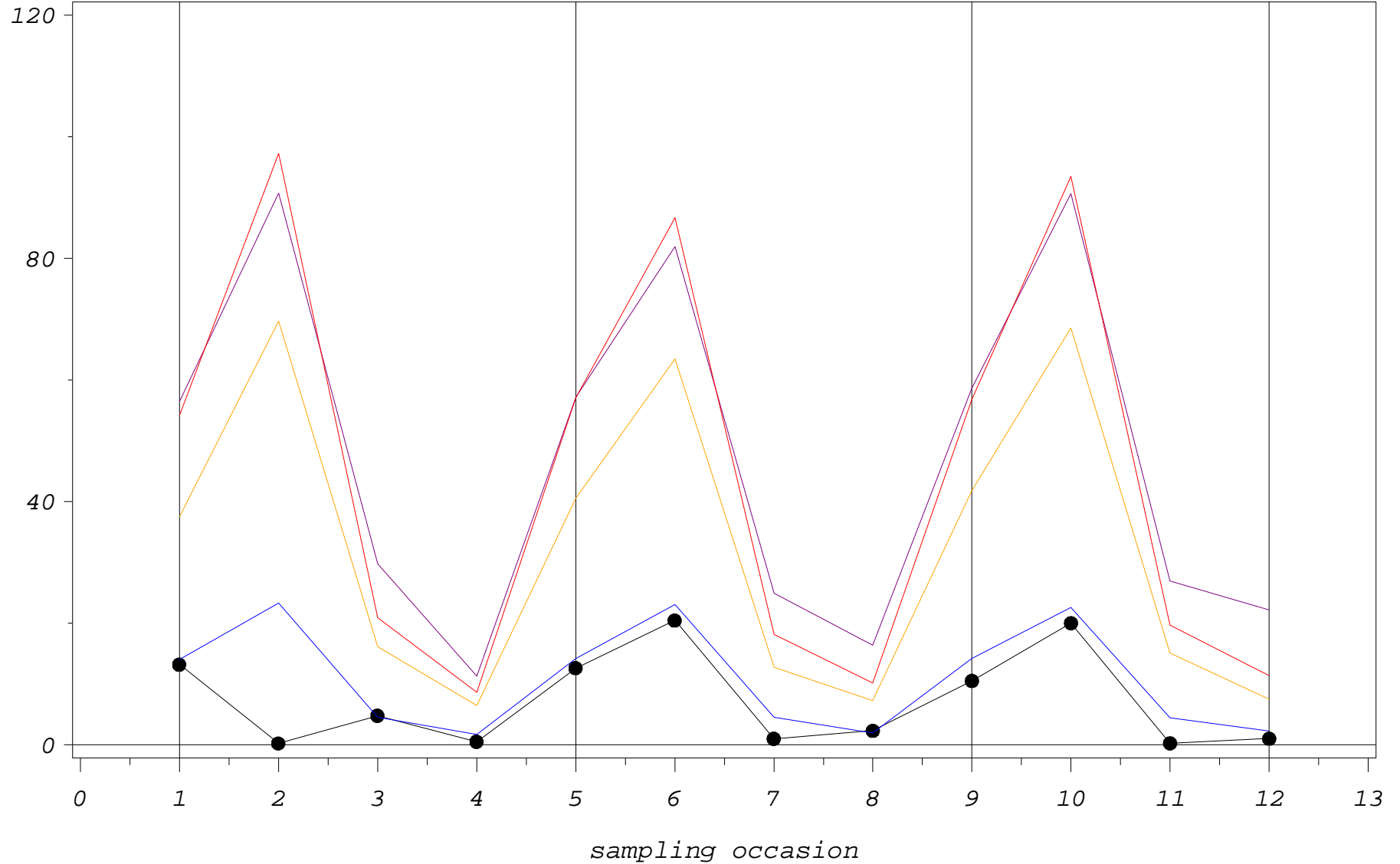


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H00903

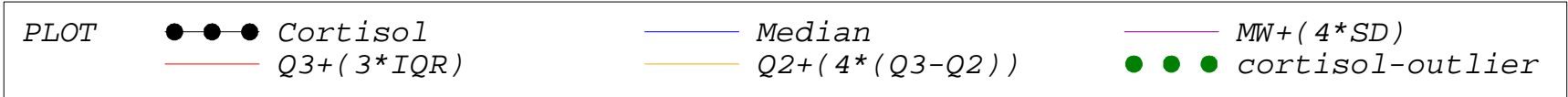
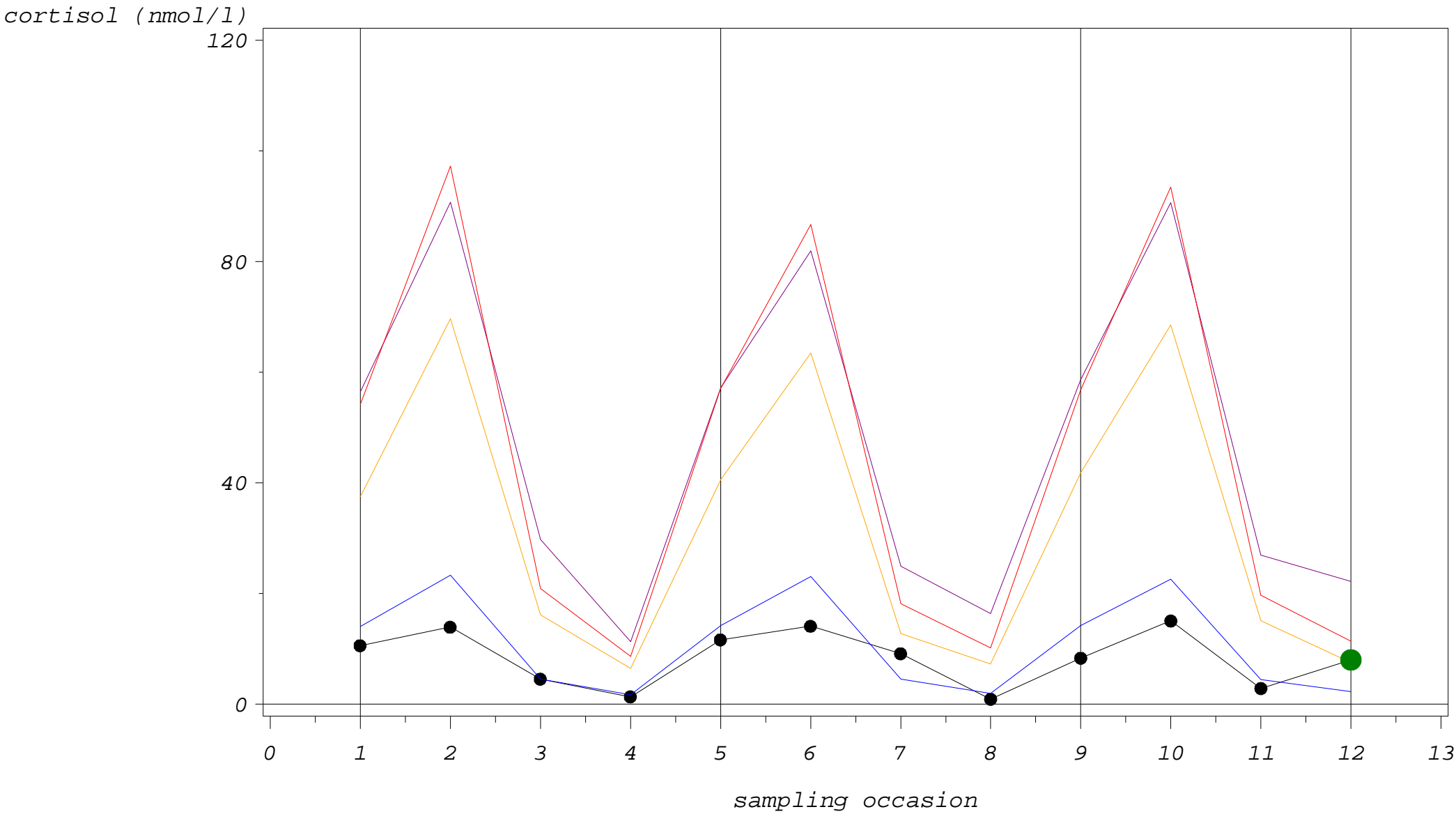
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

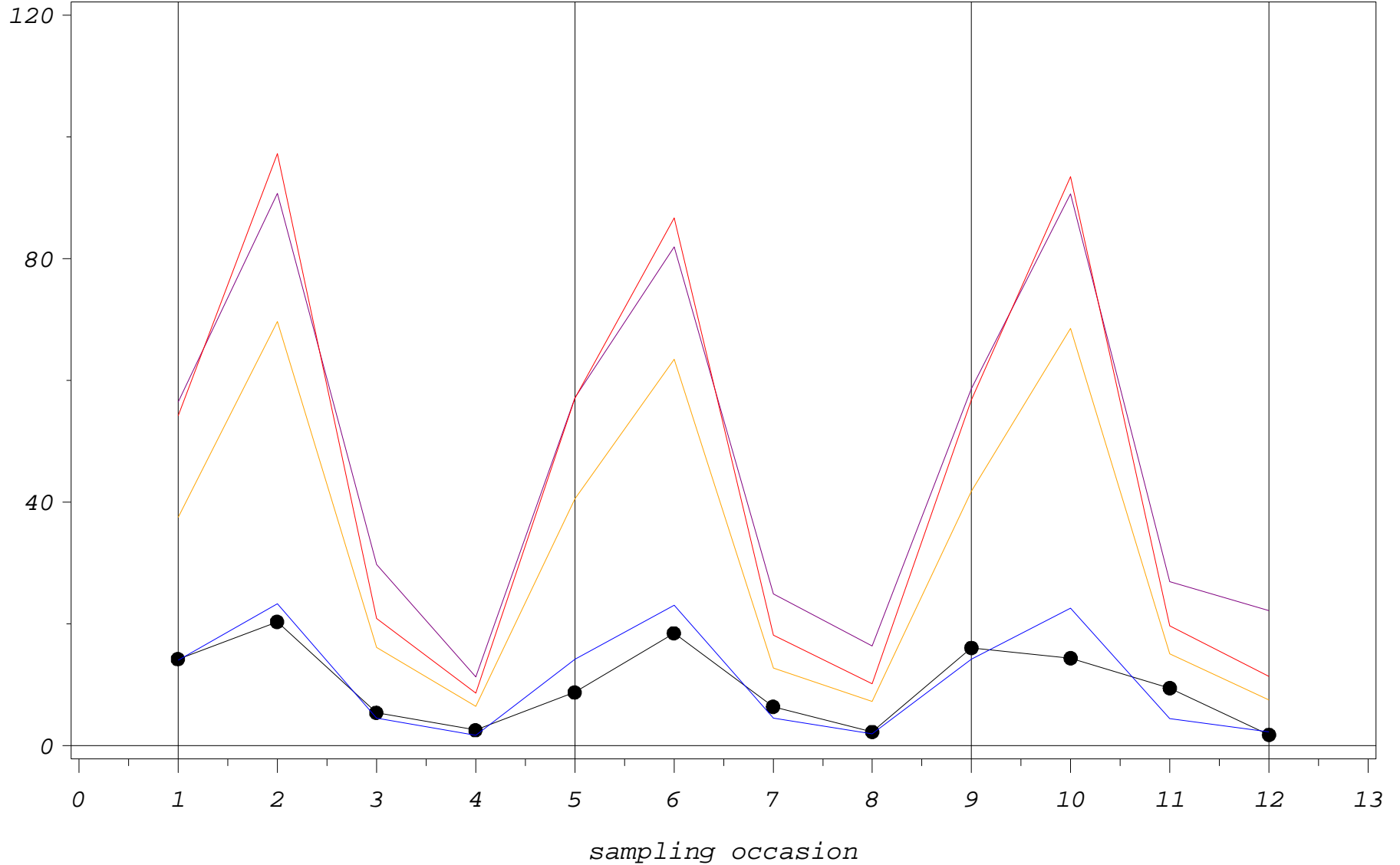
CODE=H00904



Study 2: cortisol single profiles with outlier fences

CODE=H00906

cortisol (nmol/l)

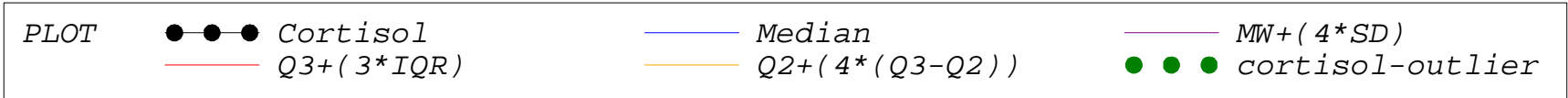
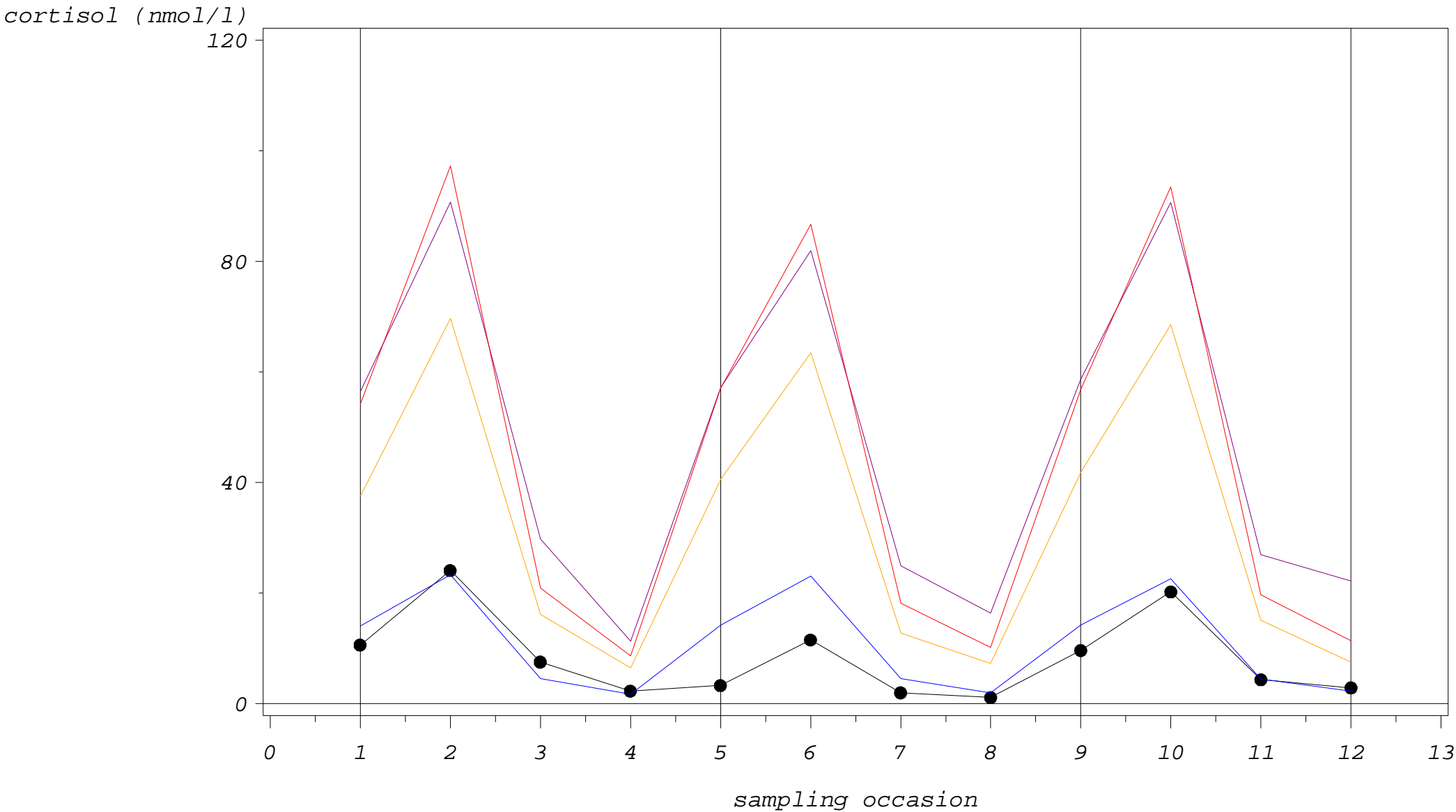


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

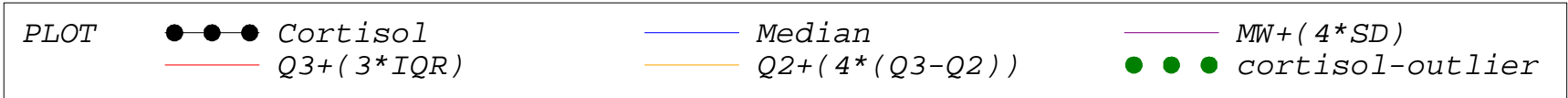
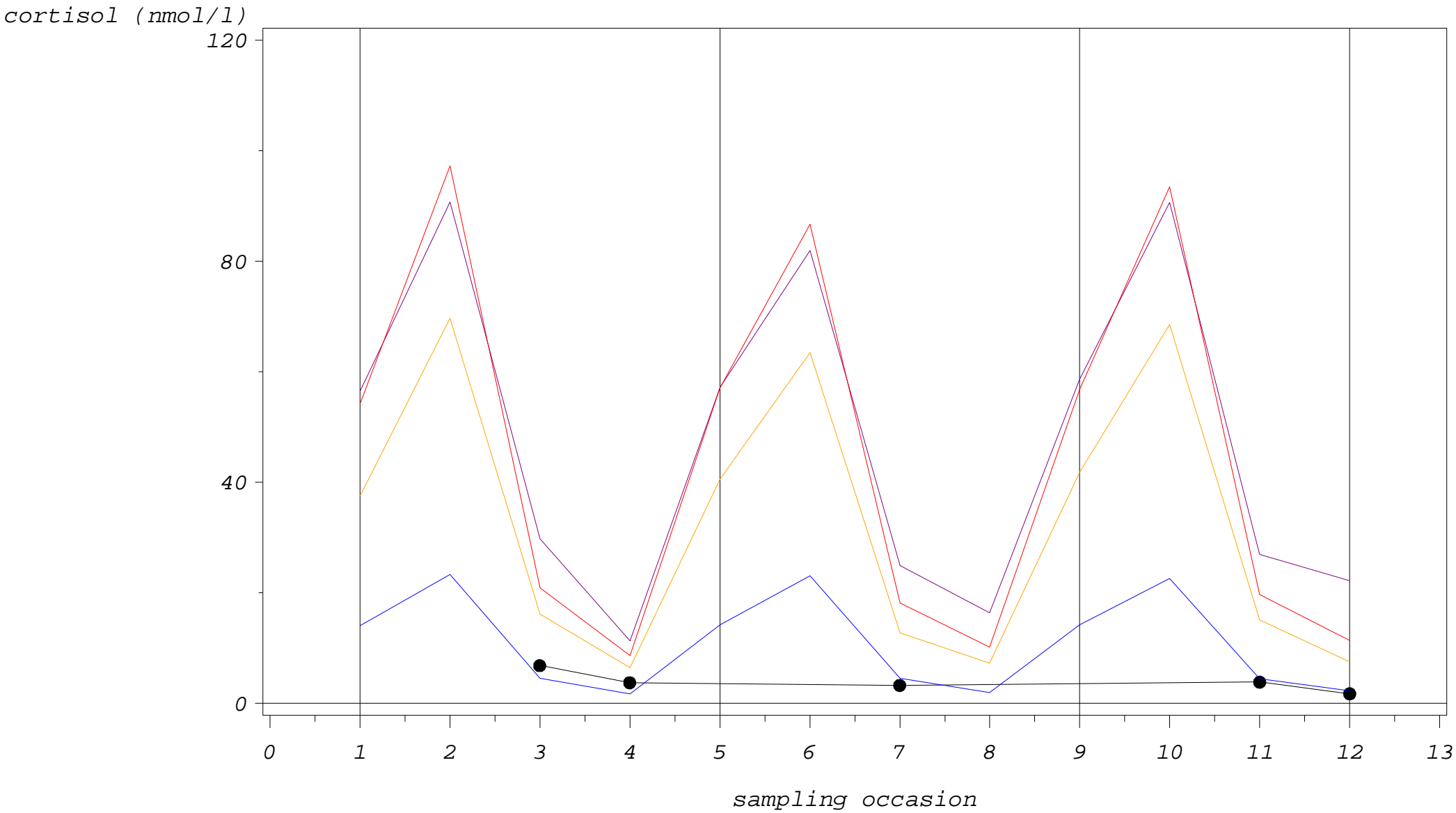
Study 2: cortisol single profiles with outlier fences

CODE=H00907



Study 2: cortisol single profiles with outlier fences

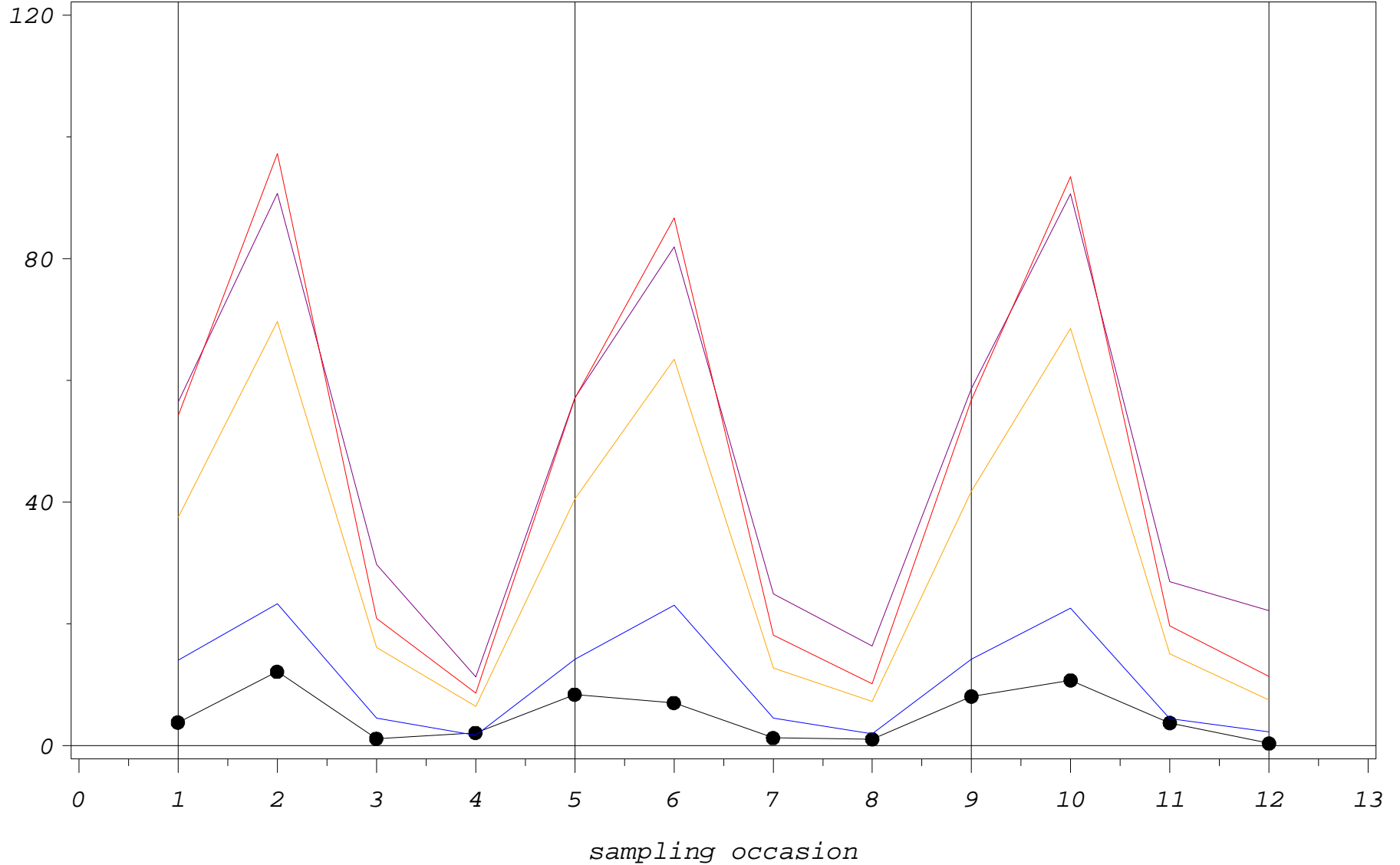
CODE=H00909



Study 2: cortisol single profiles with outlier fences

CODE=H00910

cortisol (nmol/l)

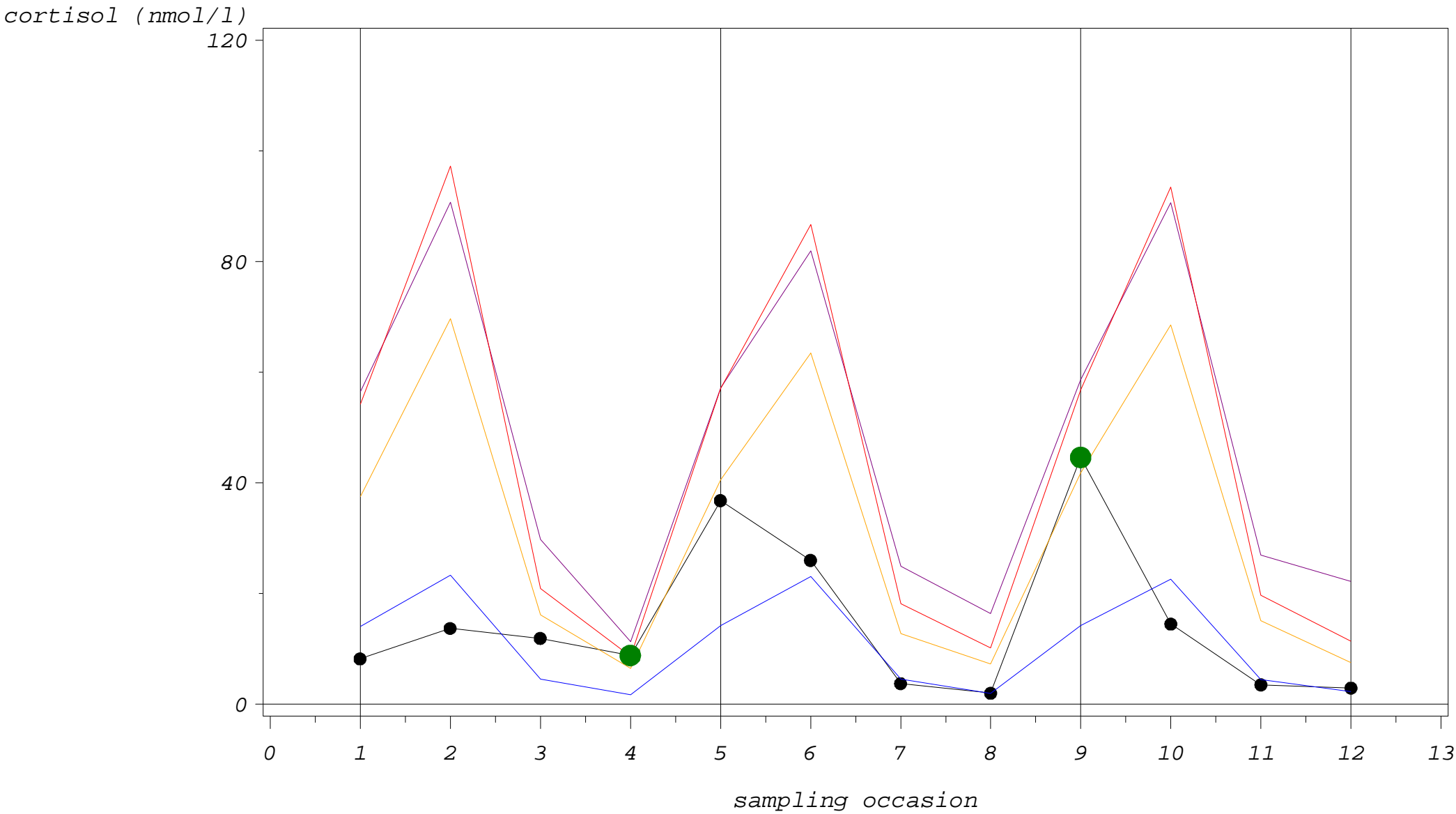


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

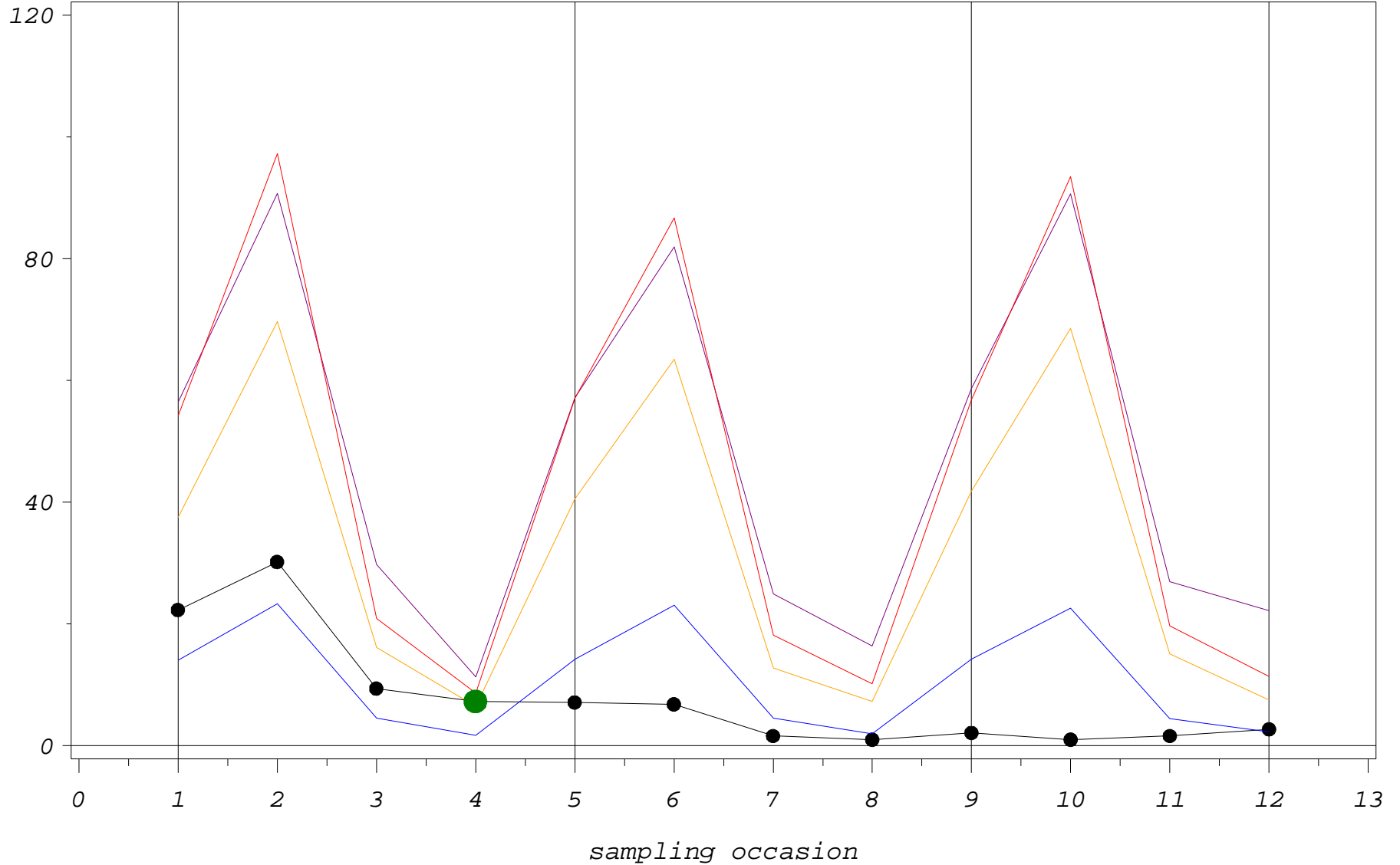
CODE=H01301



Study 2: cortisol single profiles with outlier fences

CODE=H01302

cortisol (nmol/l)

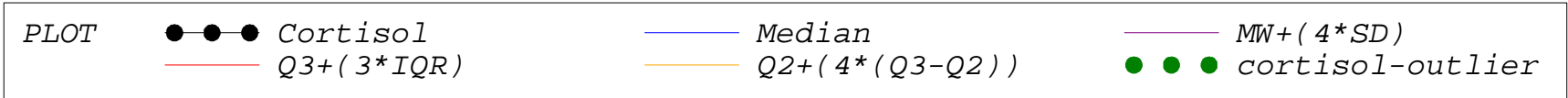
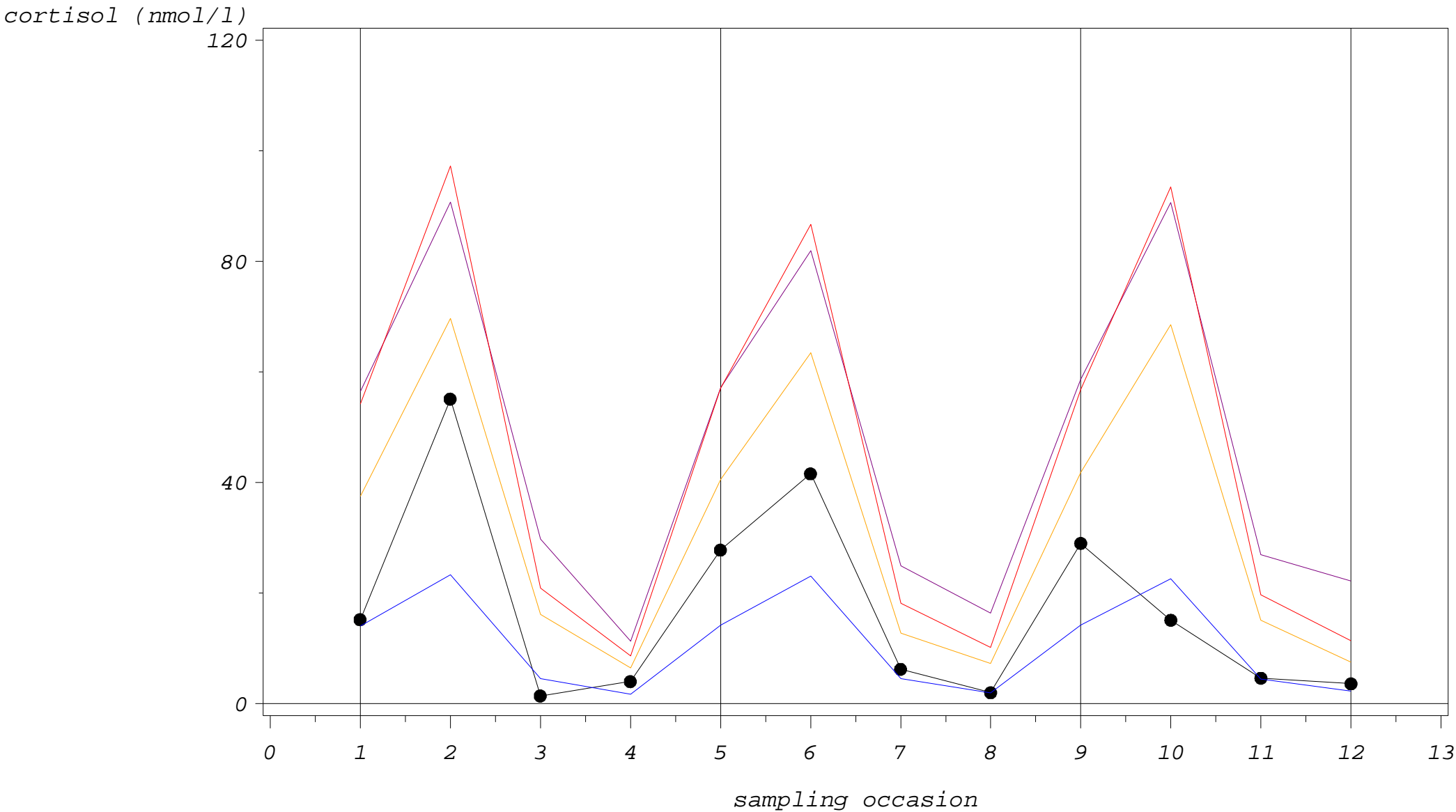


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

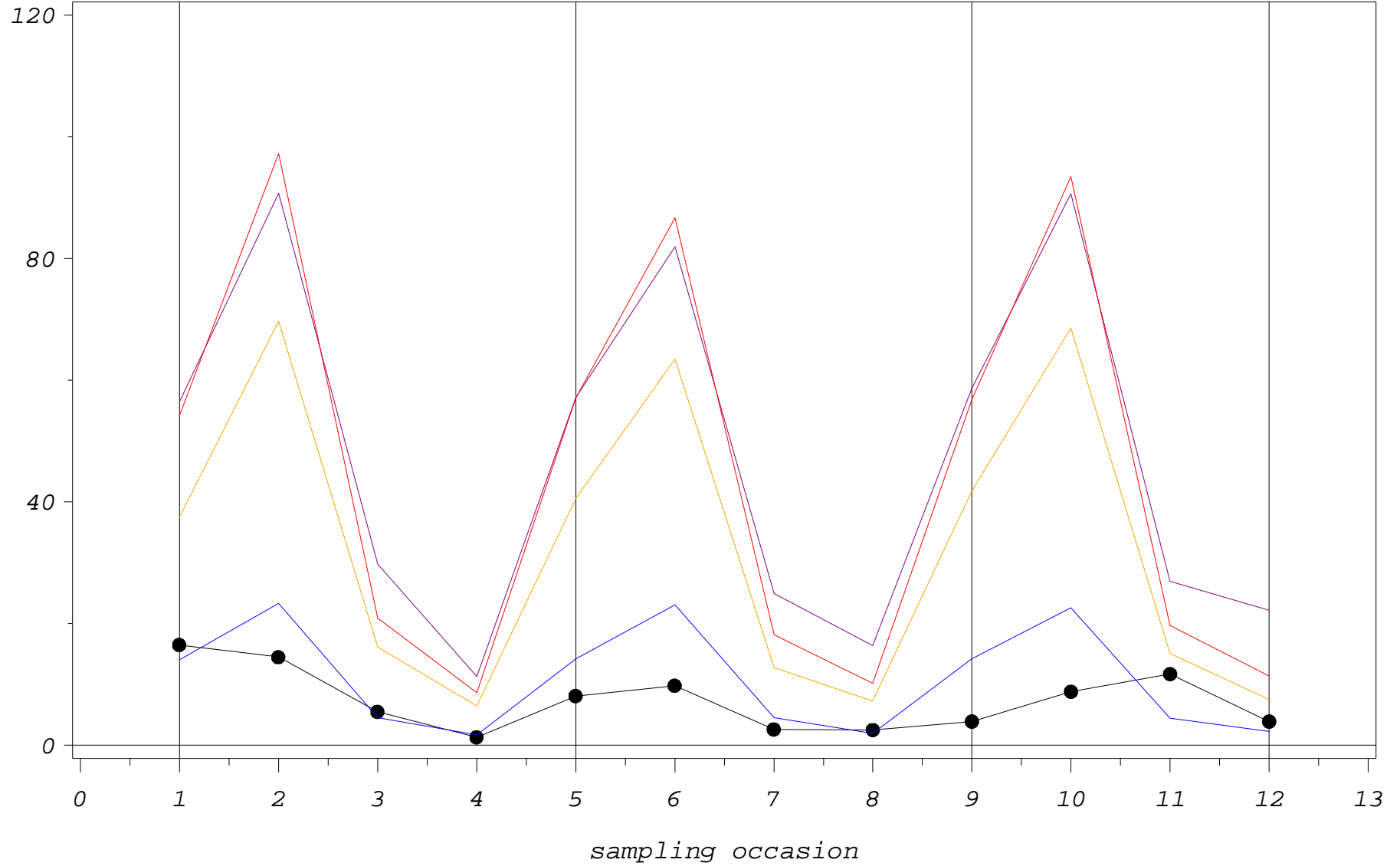
CODE=H01304



Study 2: cortisol single profiles with outlier fences

CODE=H01306

cortisol (nmol/l)



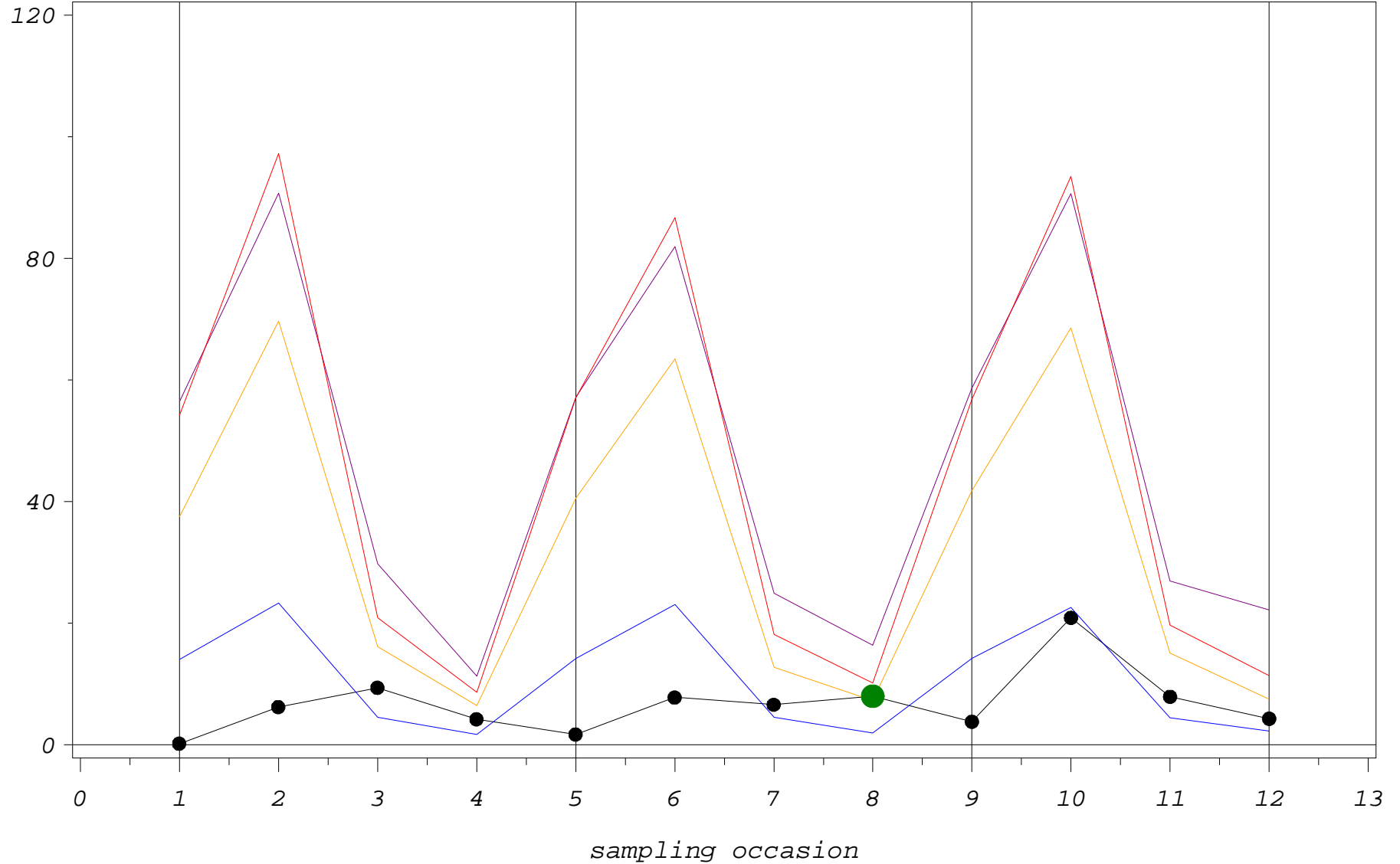
PLOT

●—●—●	Cortisol	—	Median	—	$MW + (4 * SD)$
—	$Q3 + (3 * IQR)$	—	$Q2 + (4 * (Q3 - Q2))$	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H01501

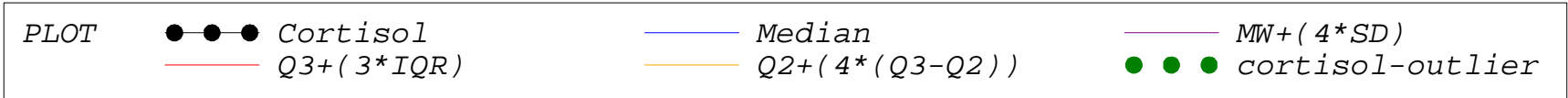
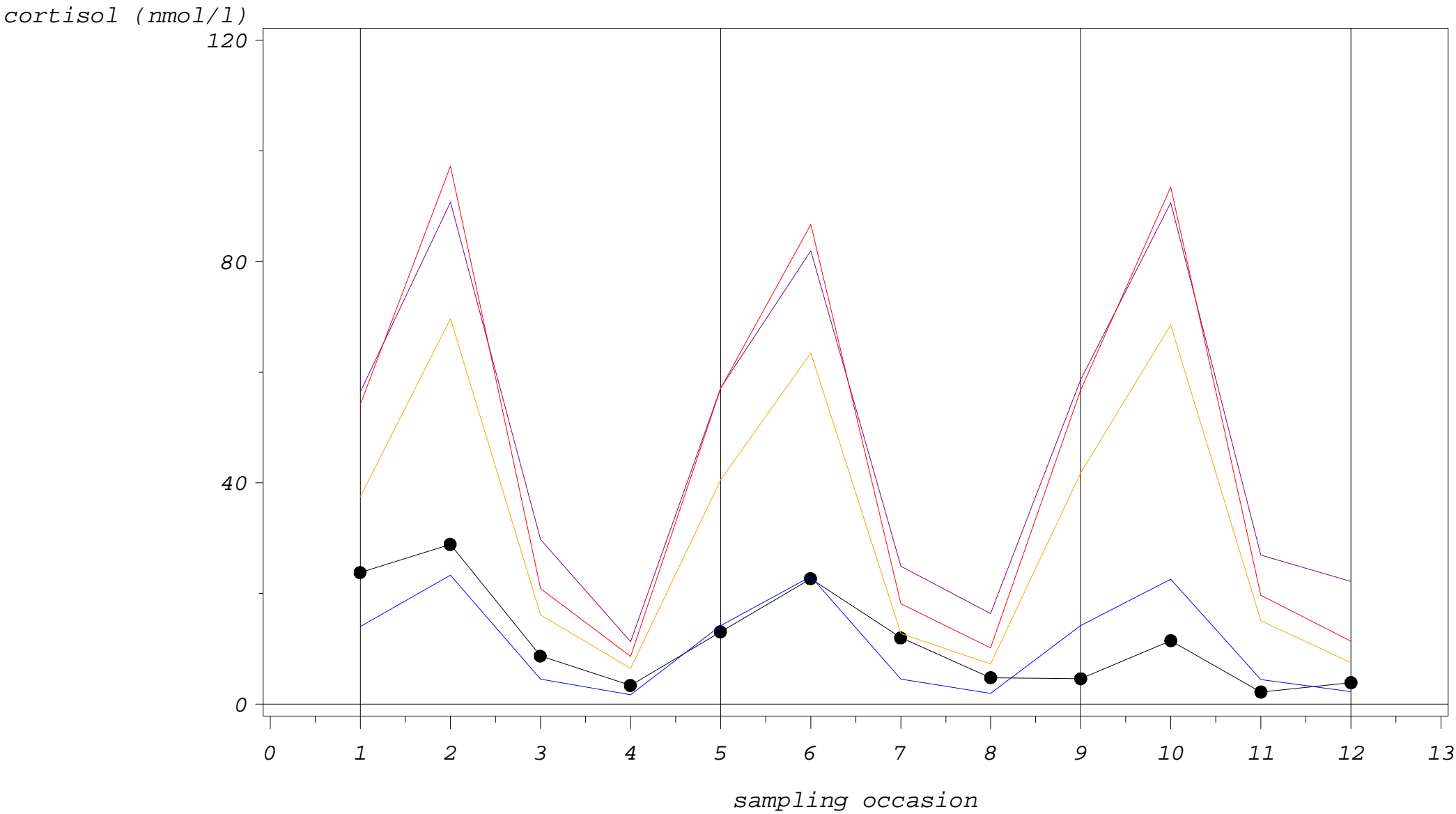
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

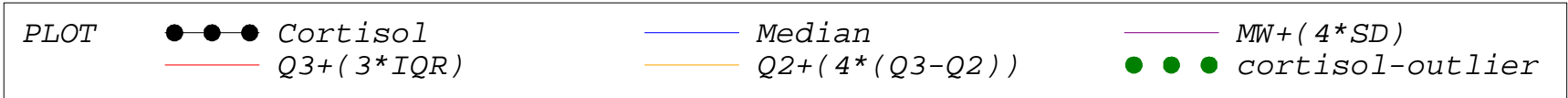
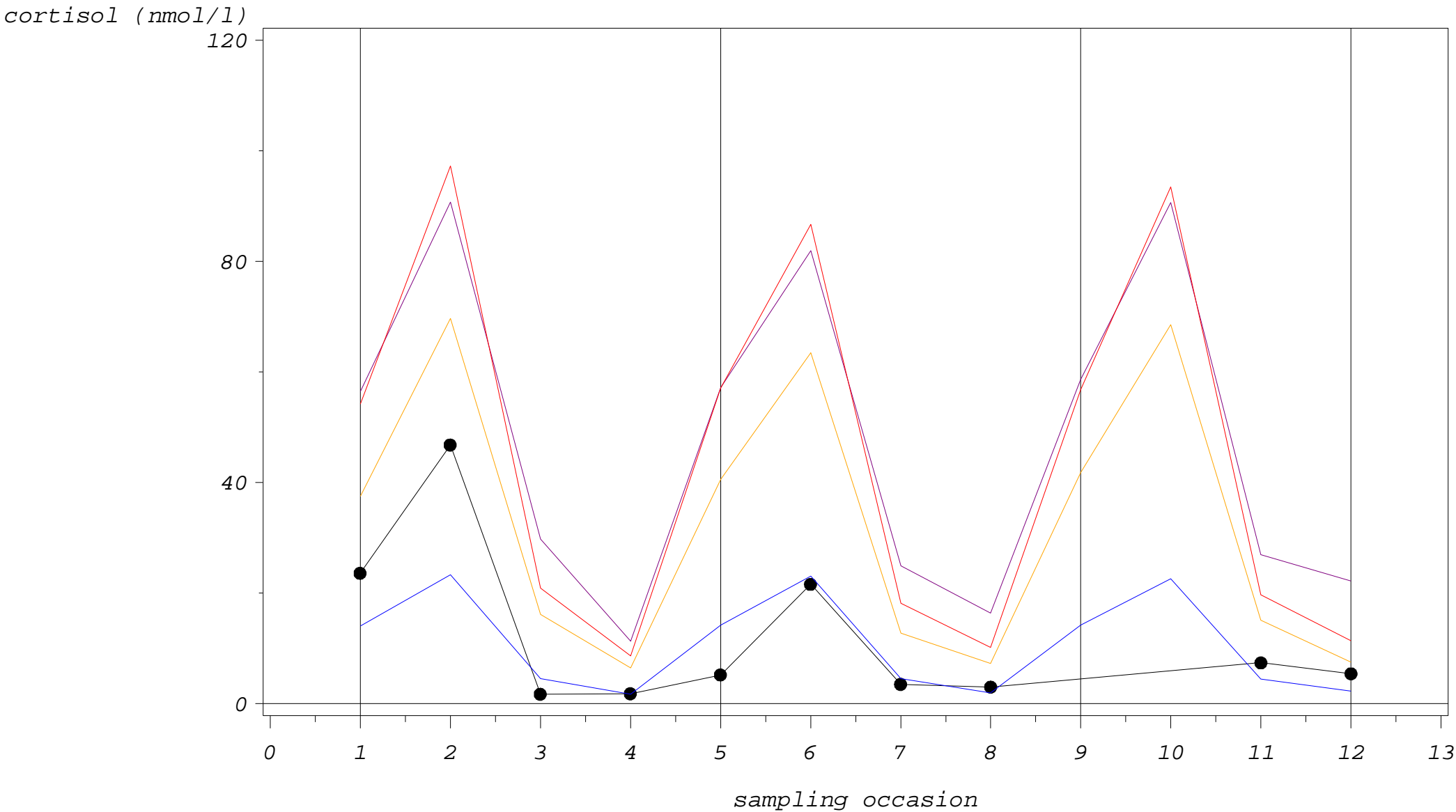
Study 2: cortisol single profiles with outlier fences

CODE=H01502



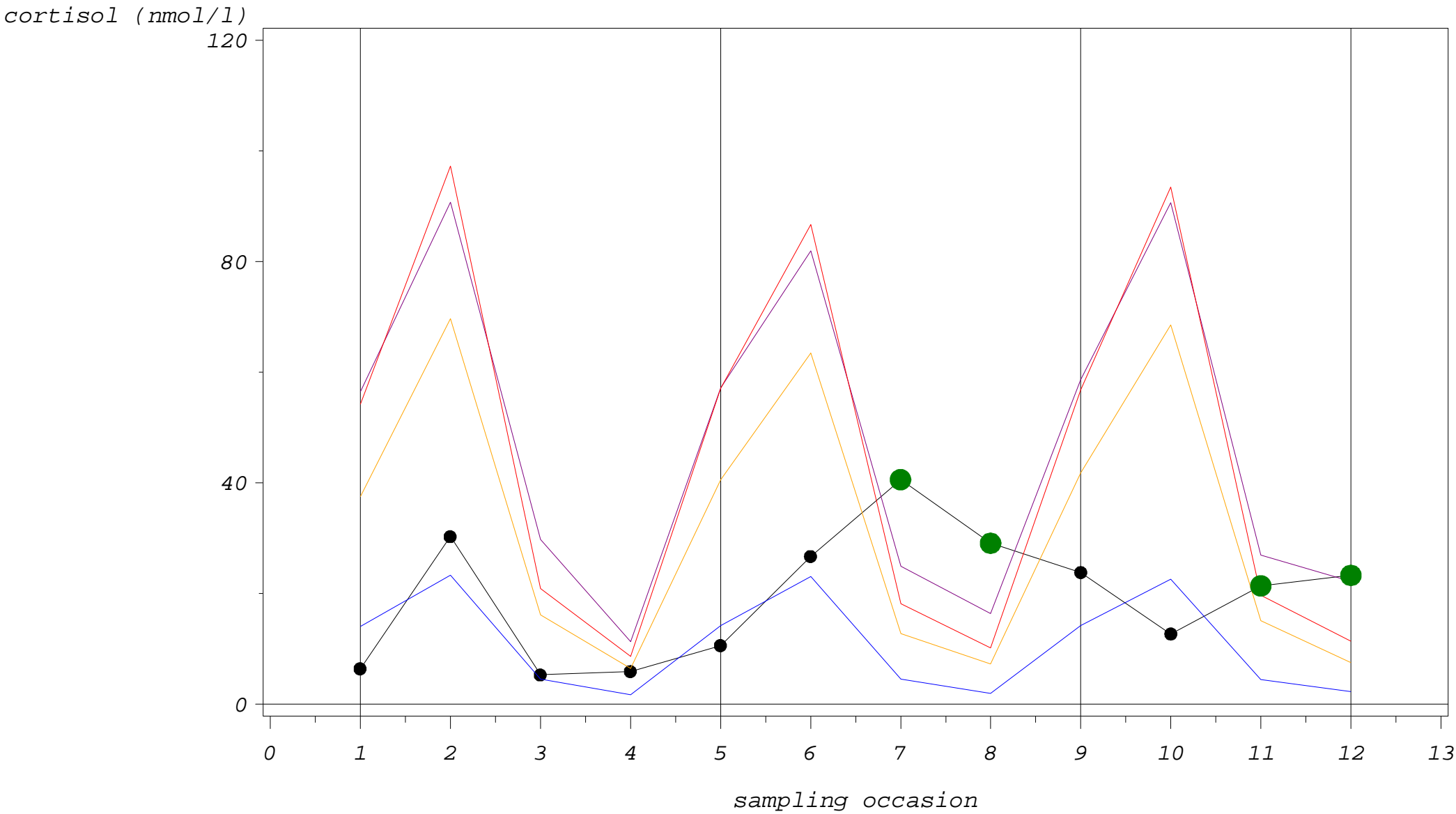
Study 2: cortisol single profiles with outlier fences

CODE=H01503



Study 2: cortisol single profiles with outlier fences

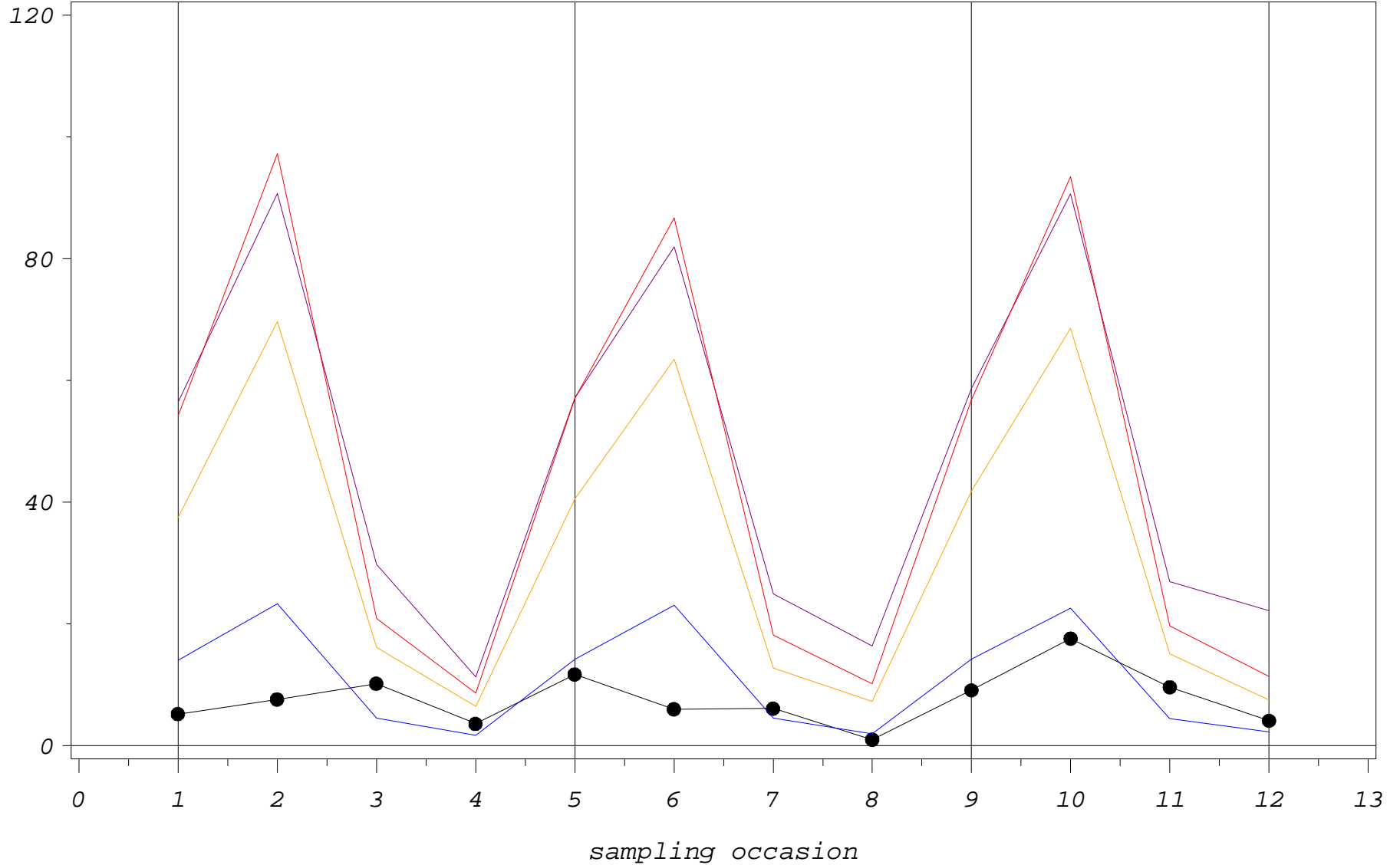
CODE=H01504



Study 2: cortisol single profiles with outlier fences

CODE=H01601

cortisol (nmol/l)



PLOT

●—●—● Cortisol
— Q3+(3*IQR)

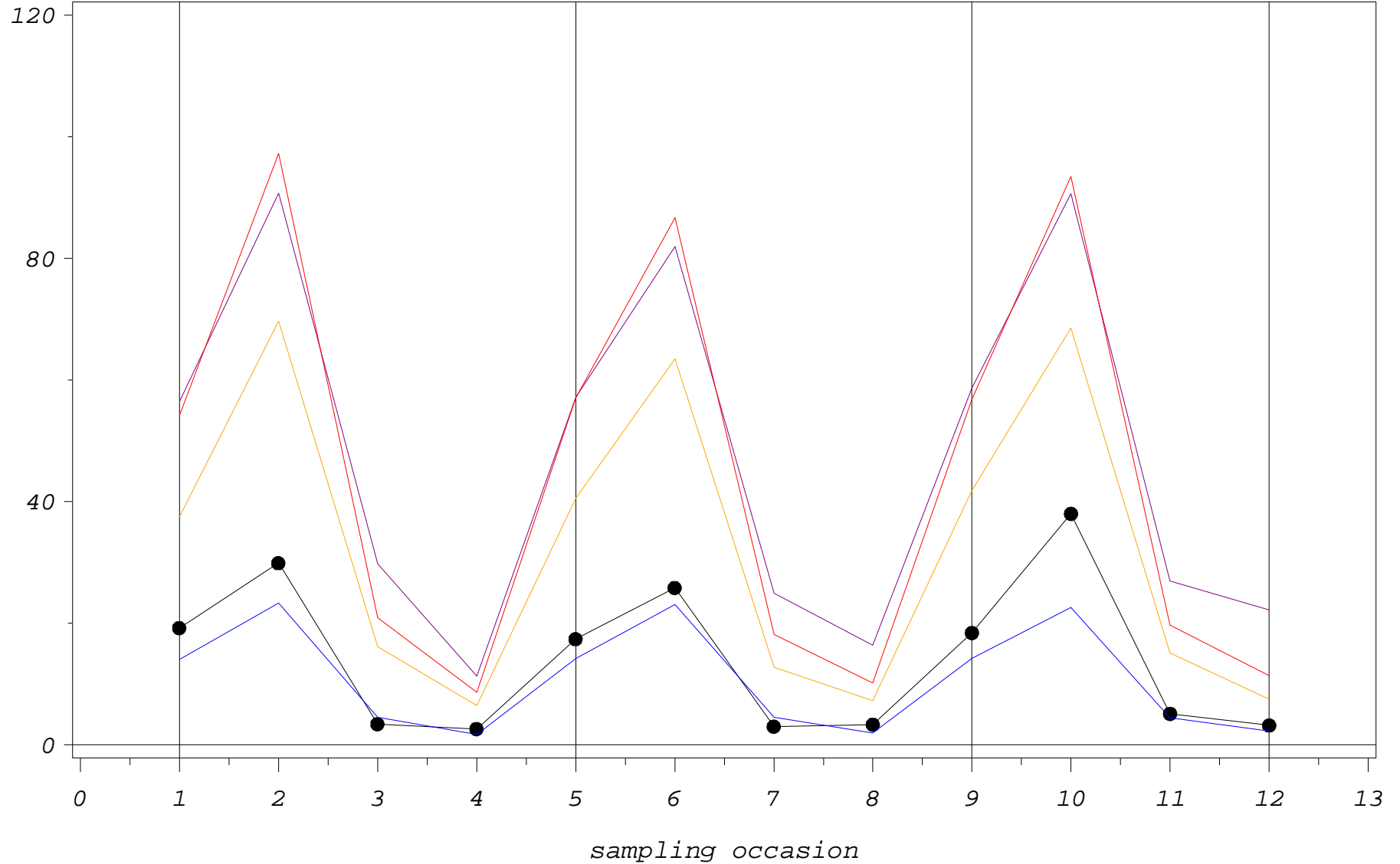
— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H01602

cortisol (nmol/l)

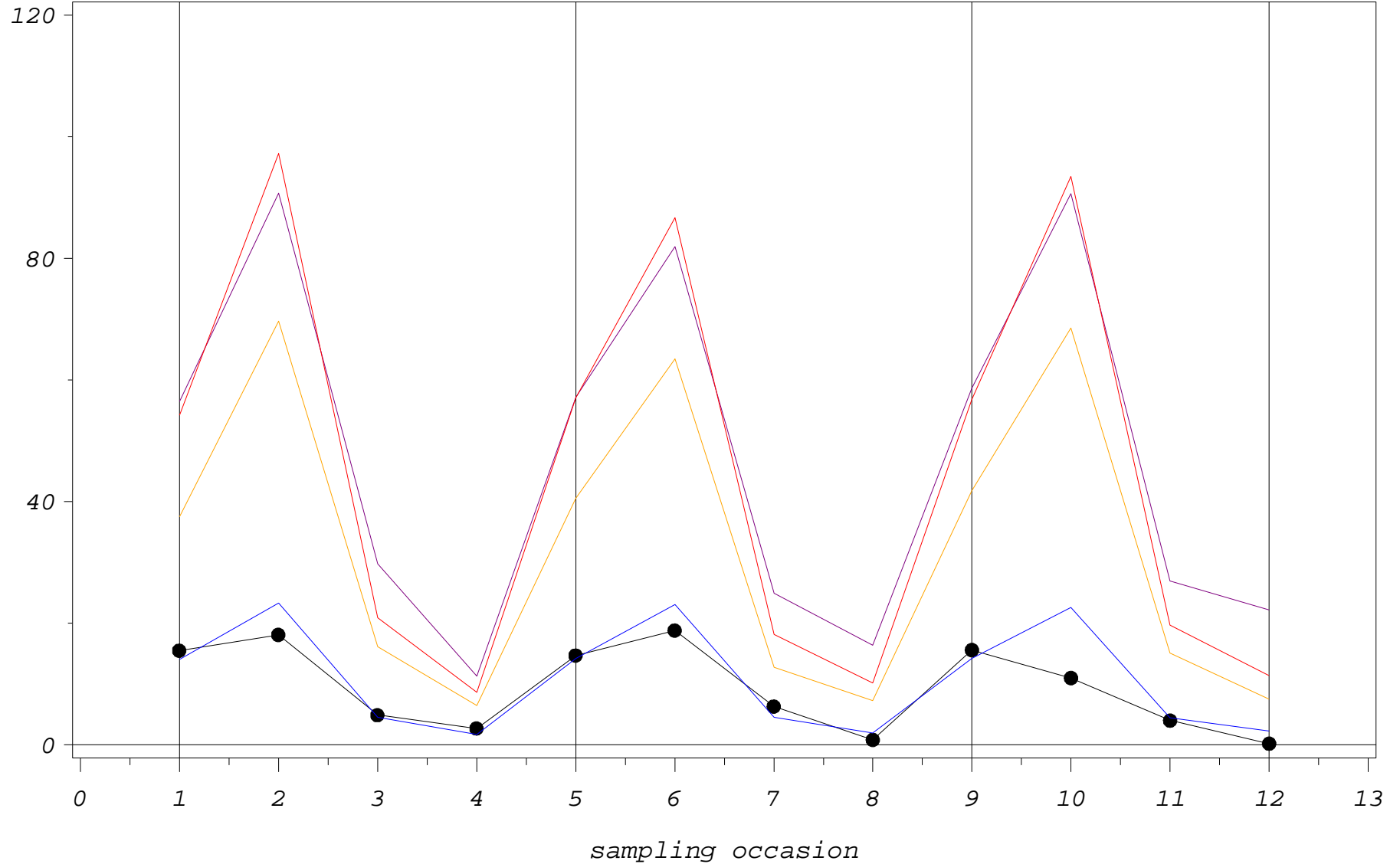


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H01604

cortisol (nmol/l)

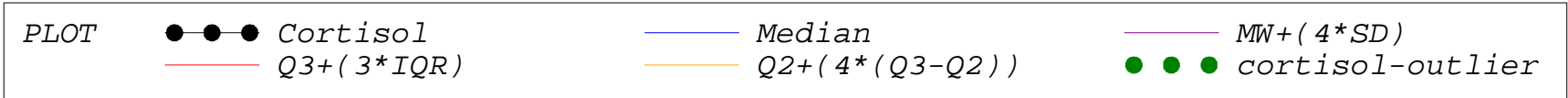
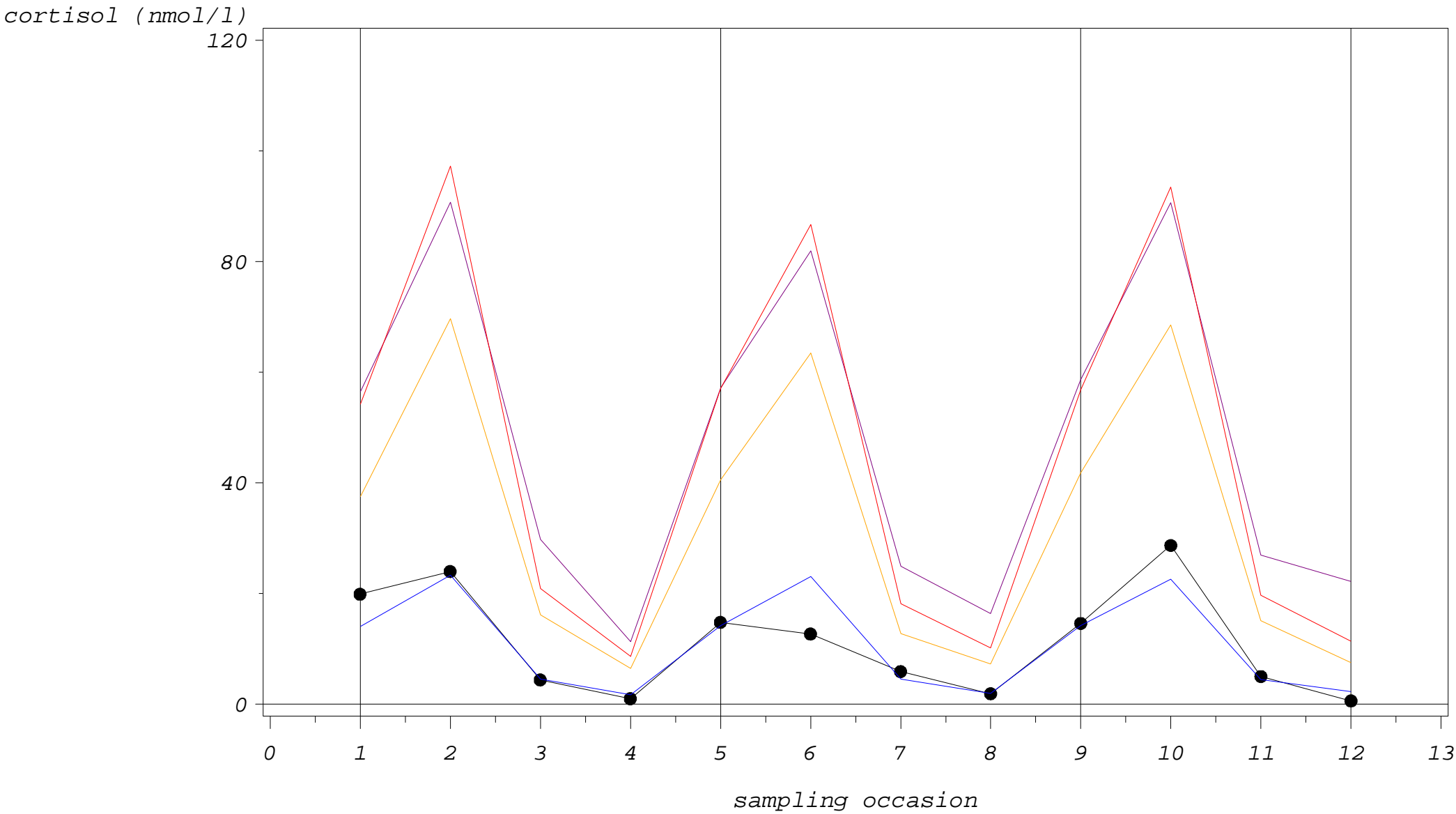


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

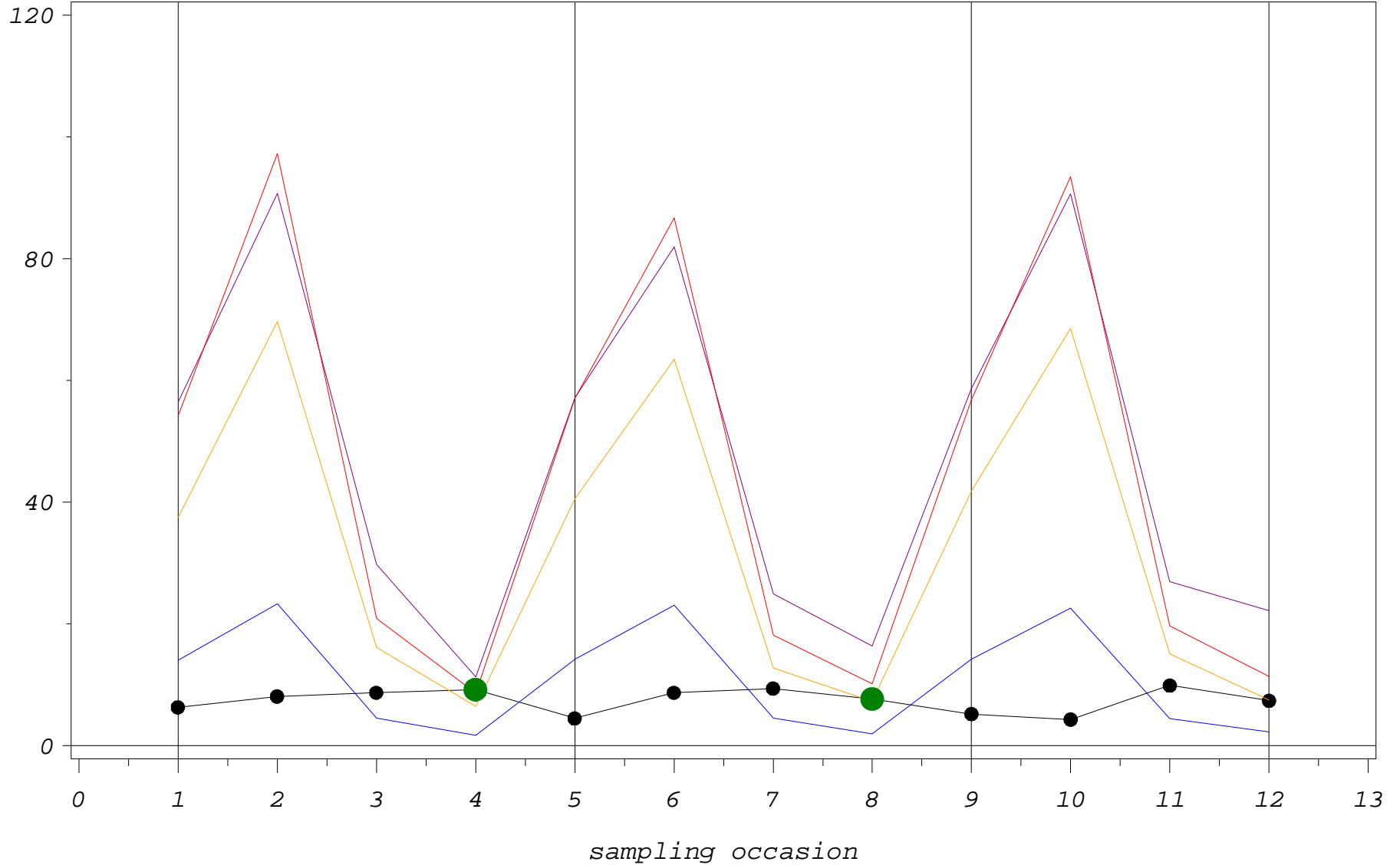
CODE=H01605



Study 2: cortisol single profiles with outlier fences

CODE=H01606

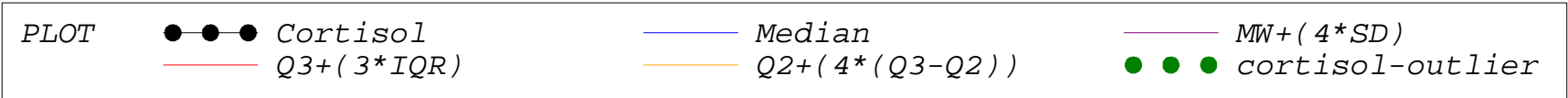
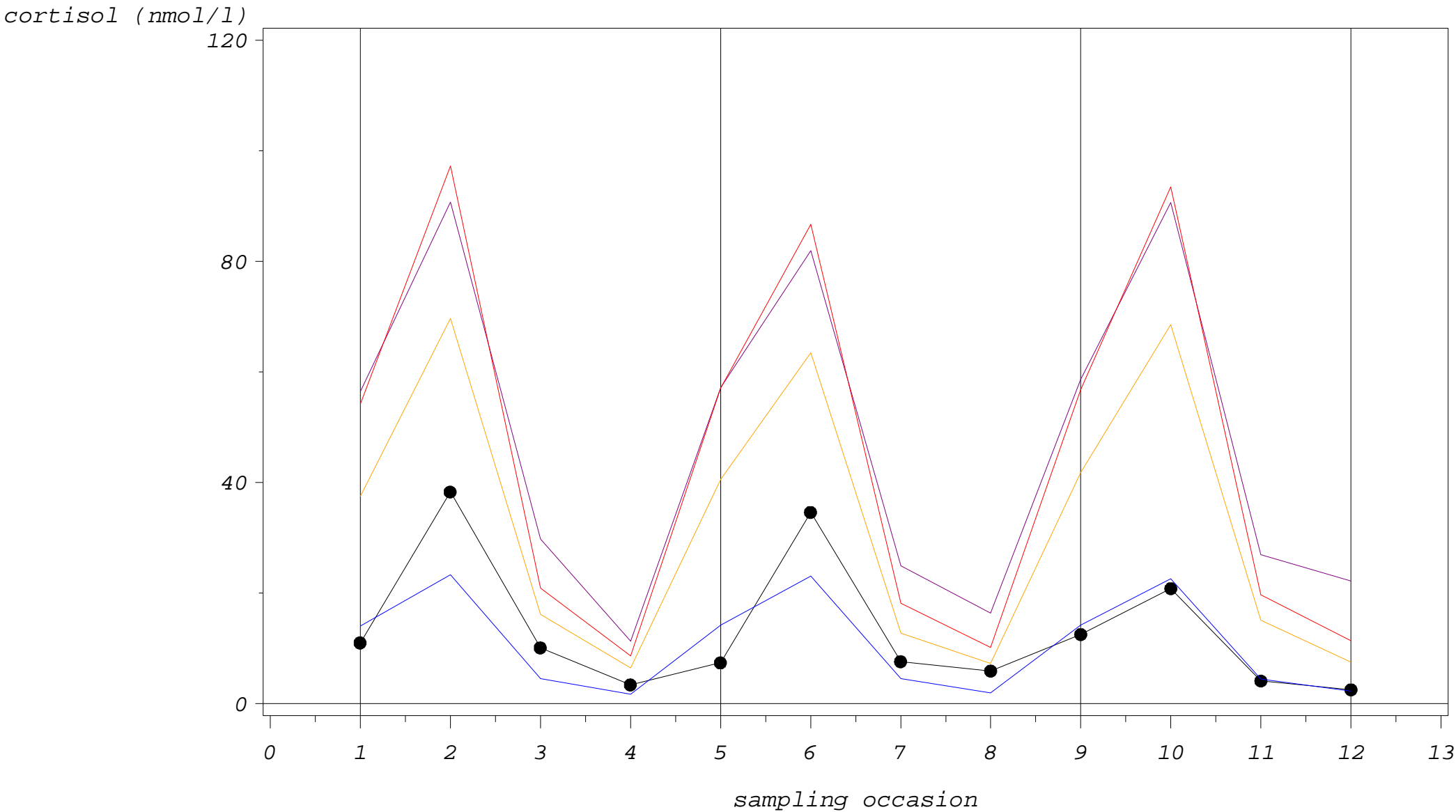
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

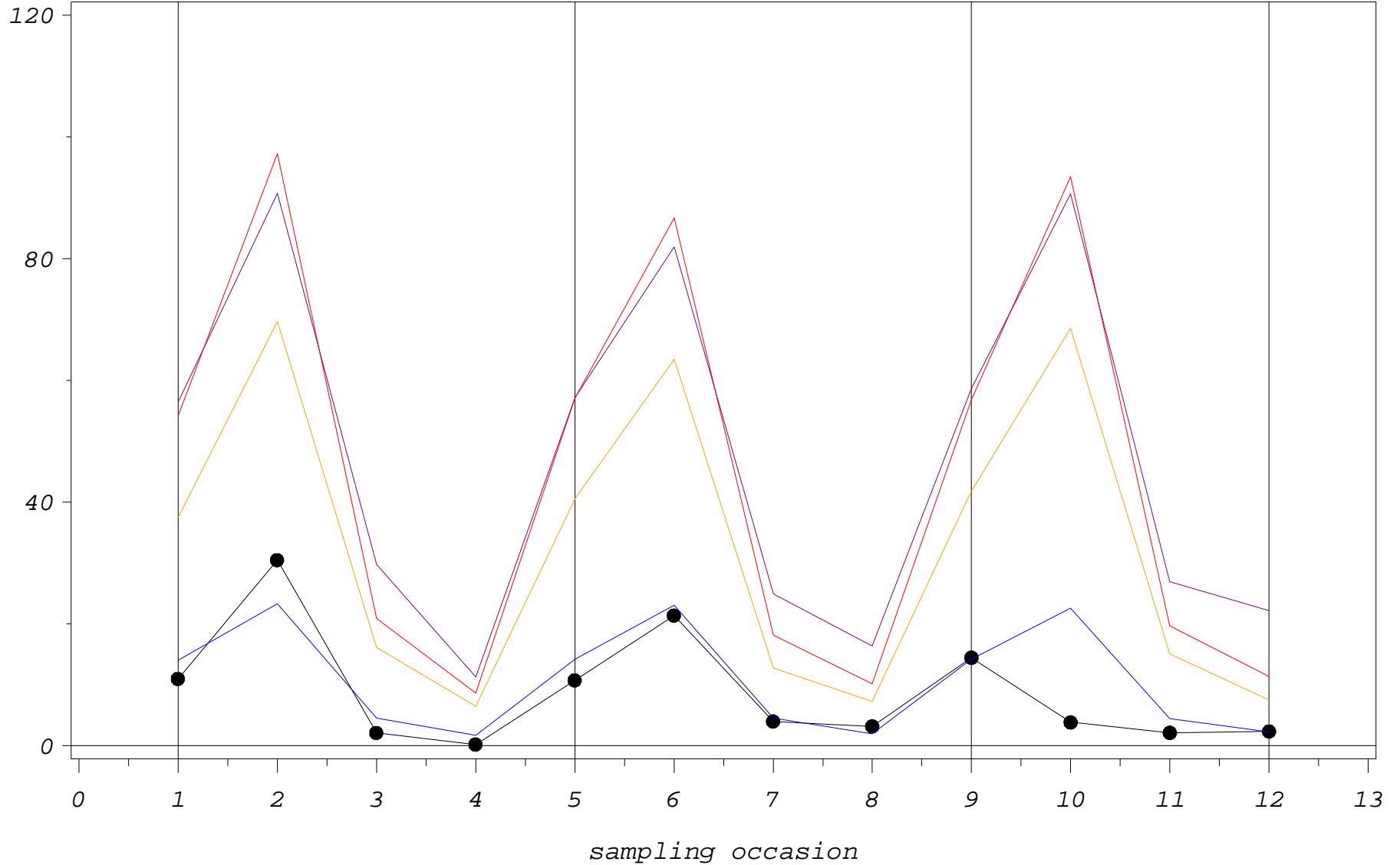
CODE=H01607



Study 2: cortisol single profiles with outlier fences

CODE=H01701

cortisol (nmol/l)



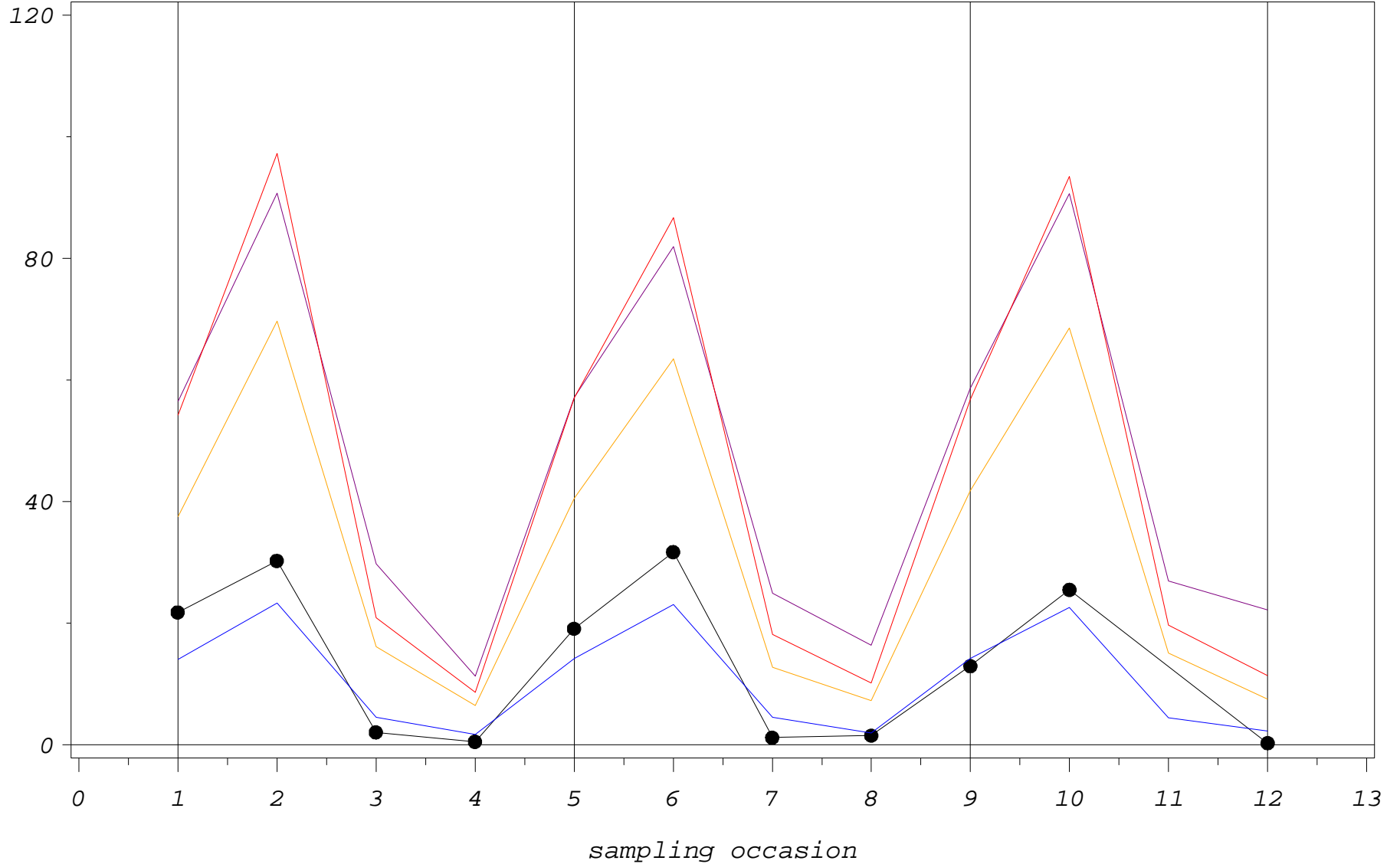
PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H01702

cortisol (nmol/l)



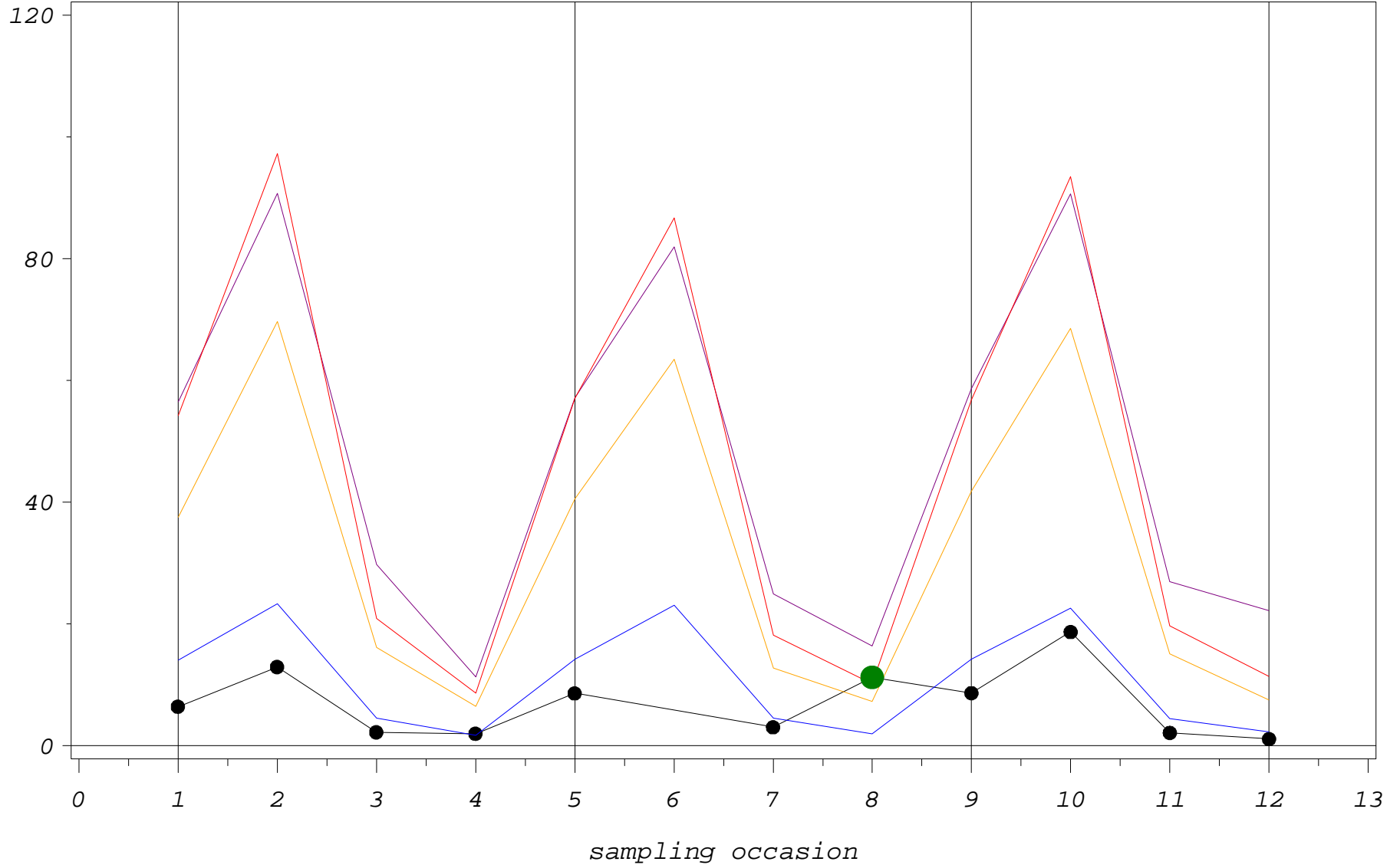
PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H01703

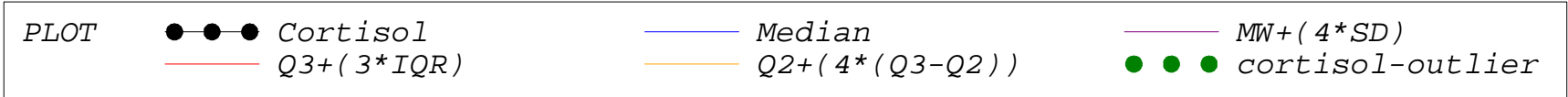
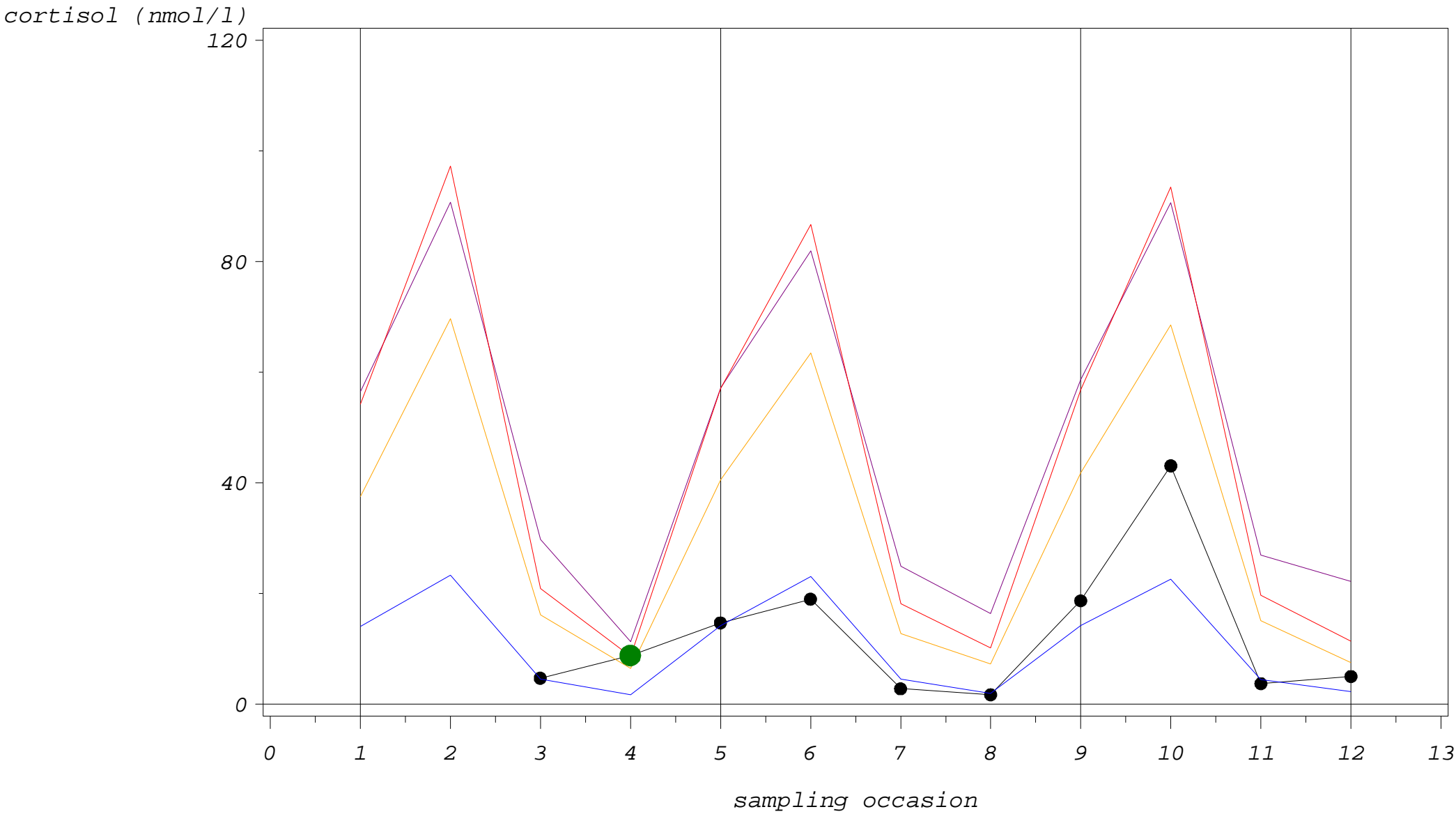
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

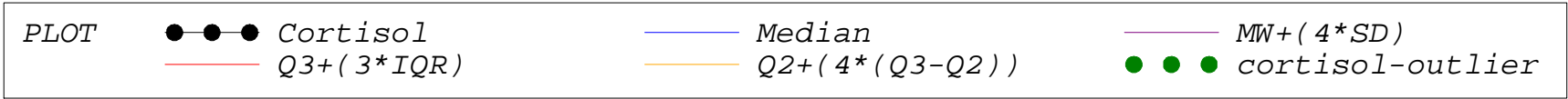
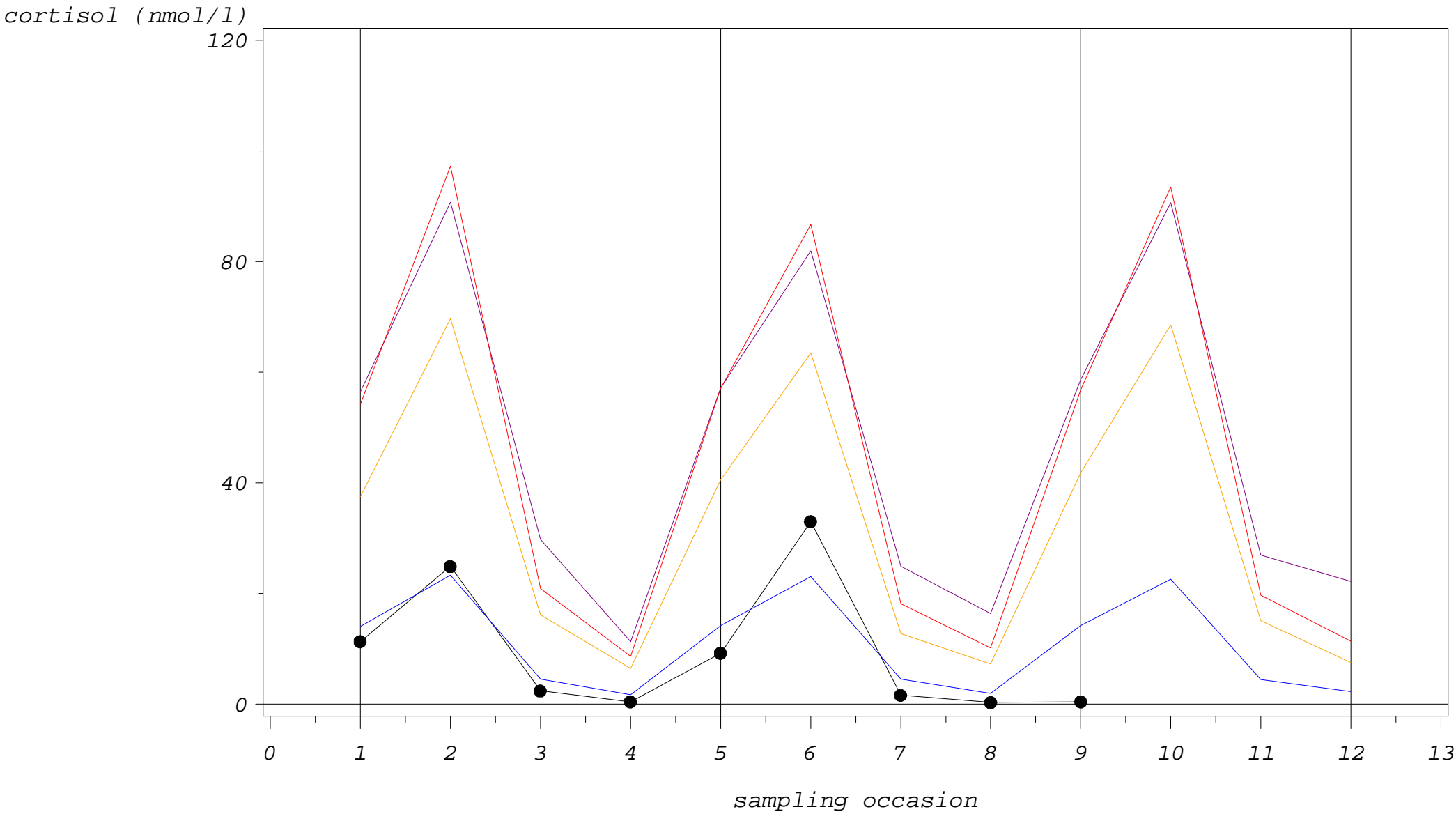
Study 2: cortisol single profiles with outlier fences

CODE=H02022



Study 2: cortisol single profiles with outlier fences

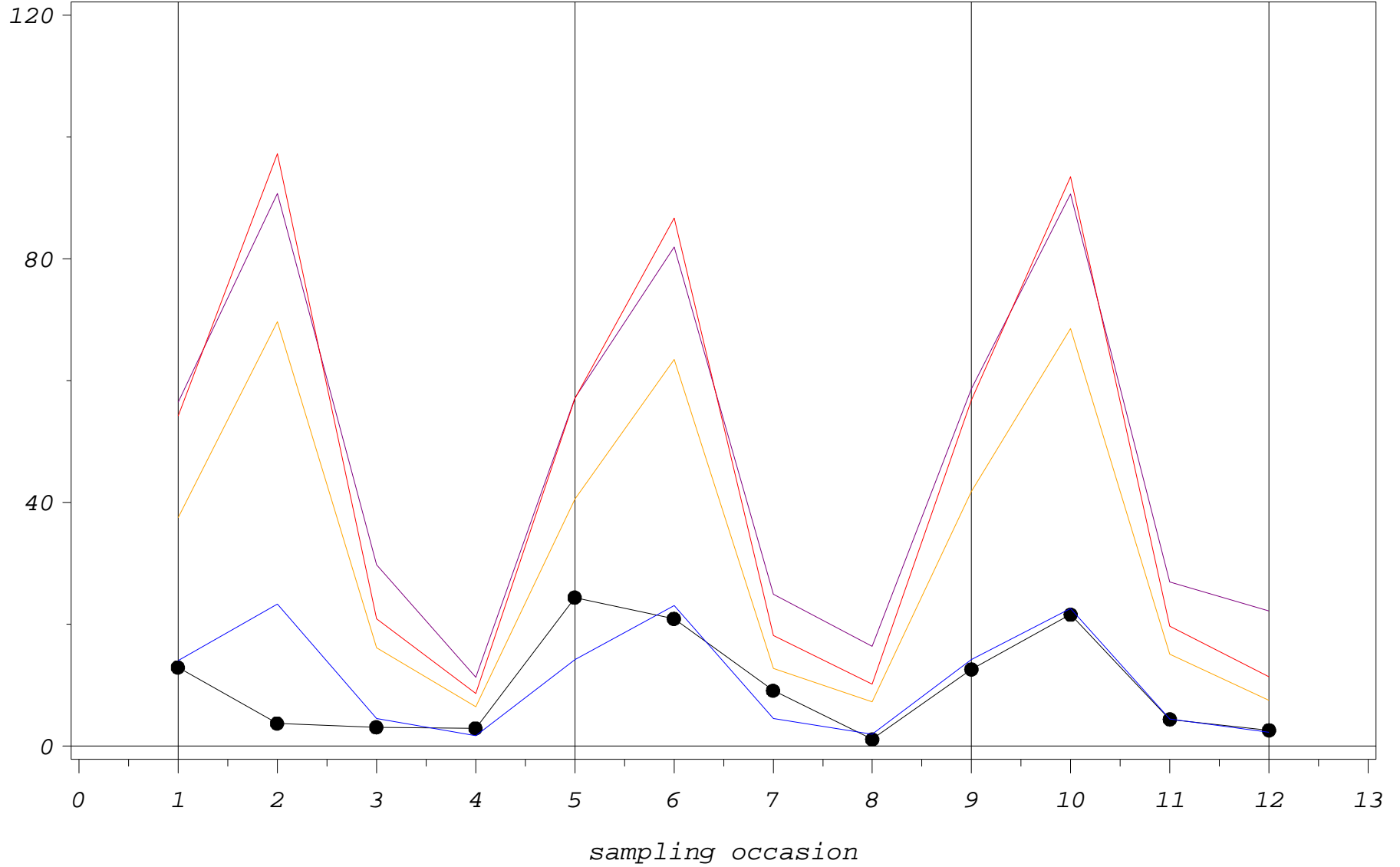
CODE=H02401



Study 2: cortisol single profiles with outlier fences

CODE=H02402

cortisol (nmol/l)



PLOT

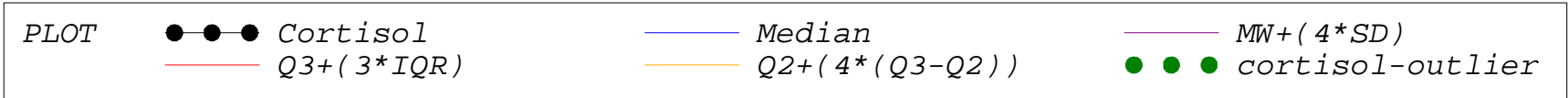
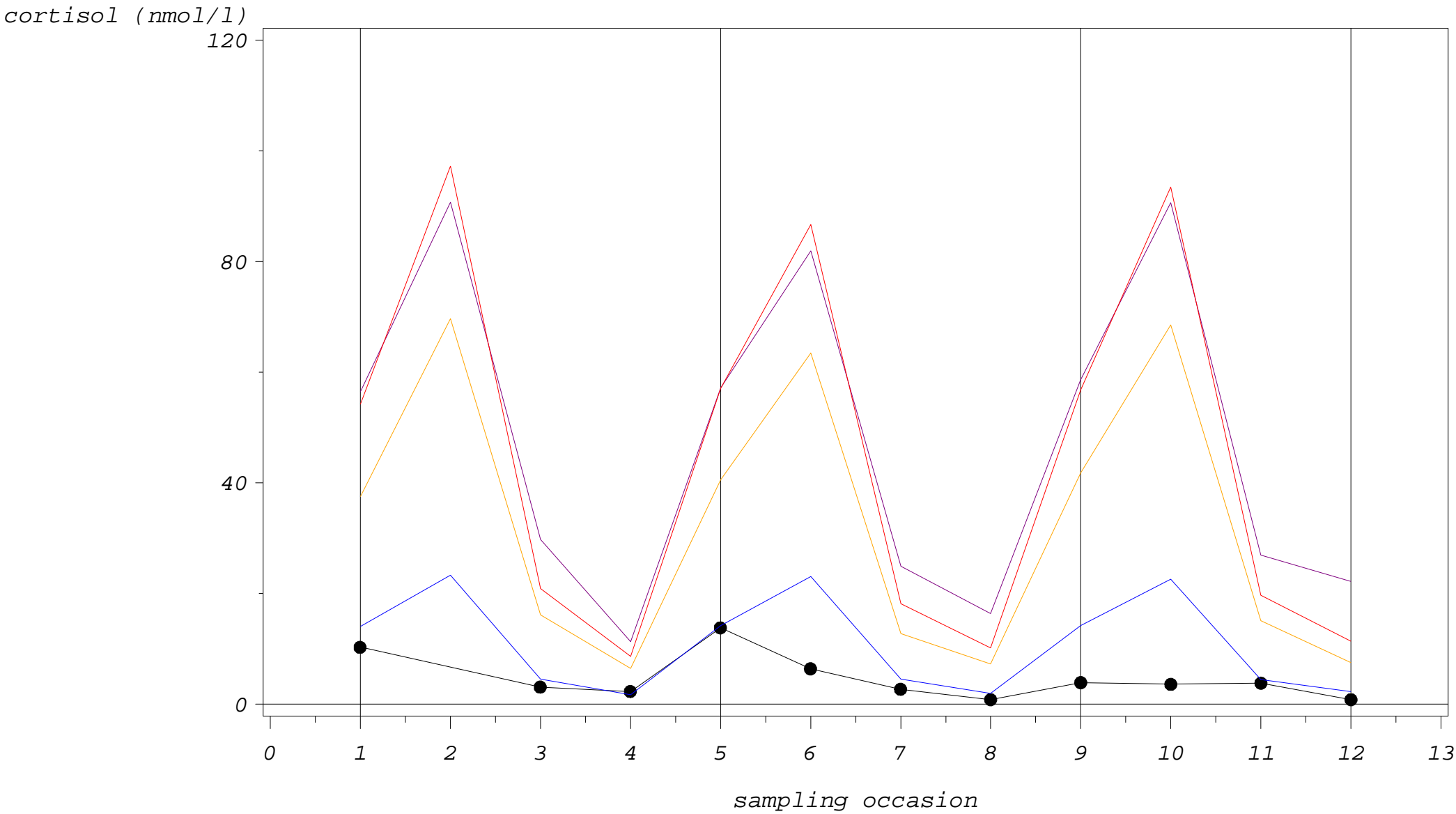
●—● Cortisol
— $Q3 + (3 * IQR)$

— Median
— $Q2 + (4 * (Q3 - Q2))$

— $MW + (4 * SD)$
● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

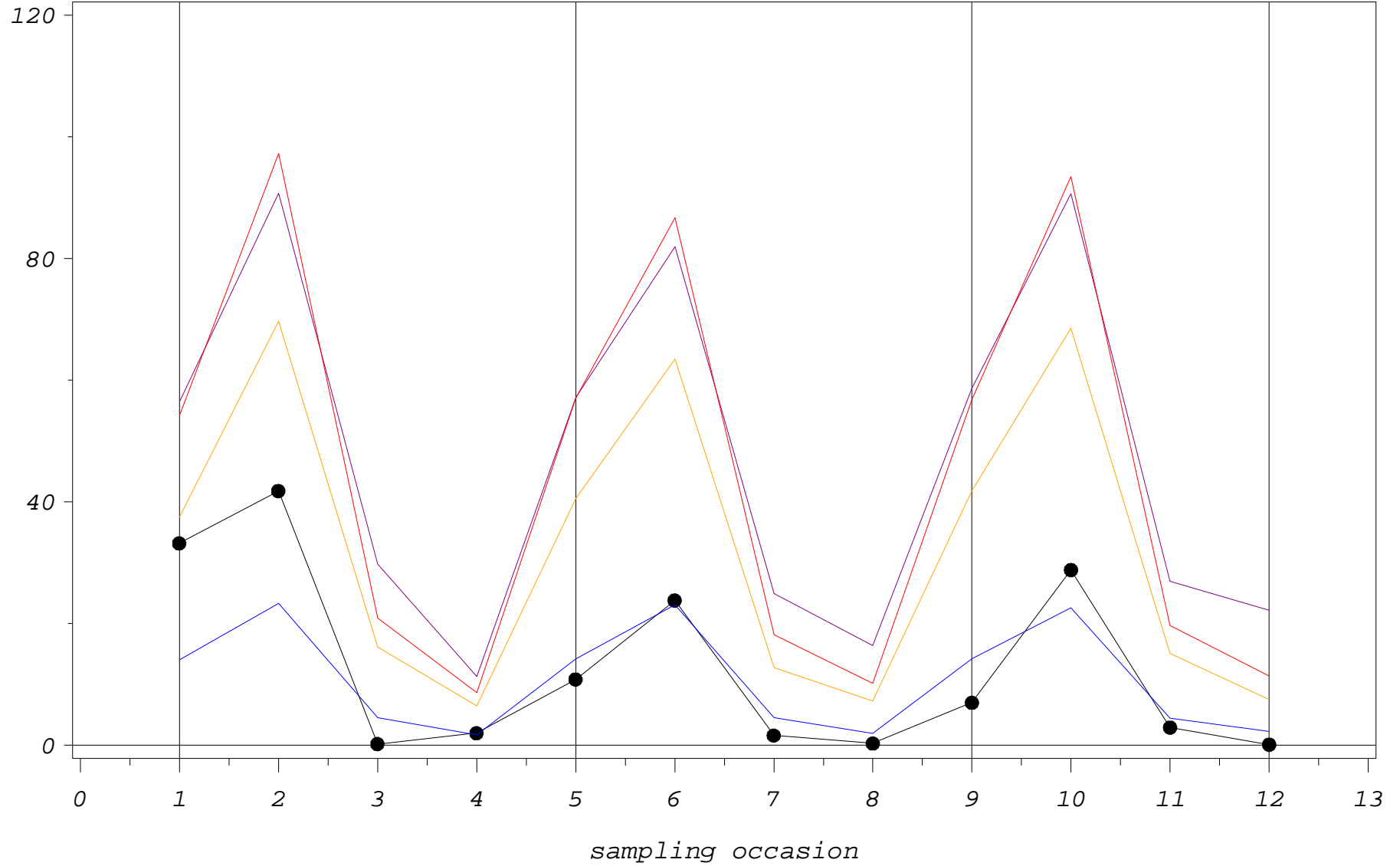
CODE=H02403



Study 2: cortisol single profiles with outlier fences

CODE=H02404

cortisol (nmol/l)



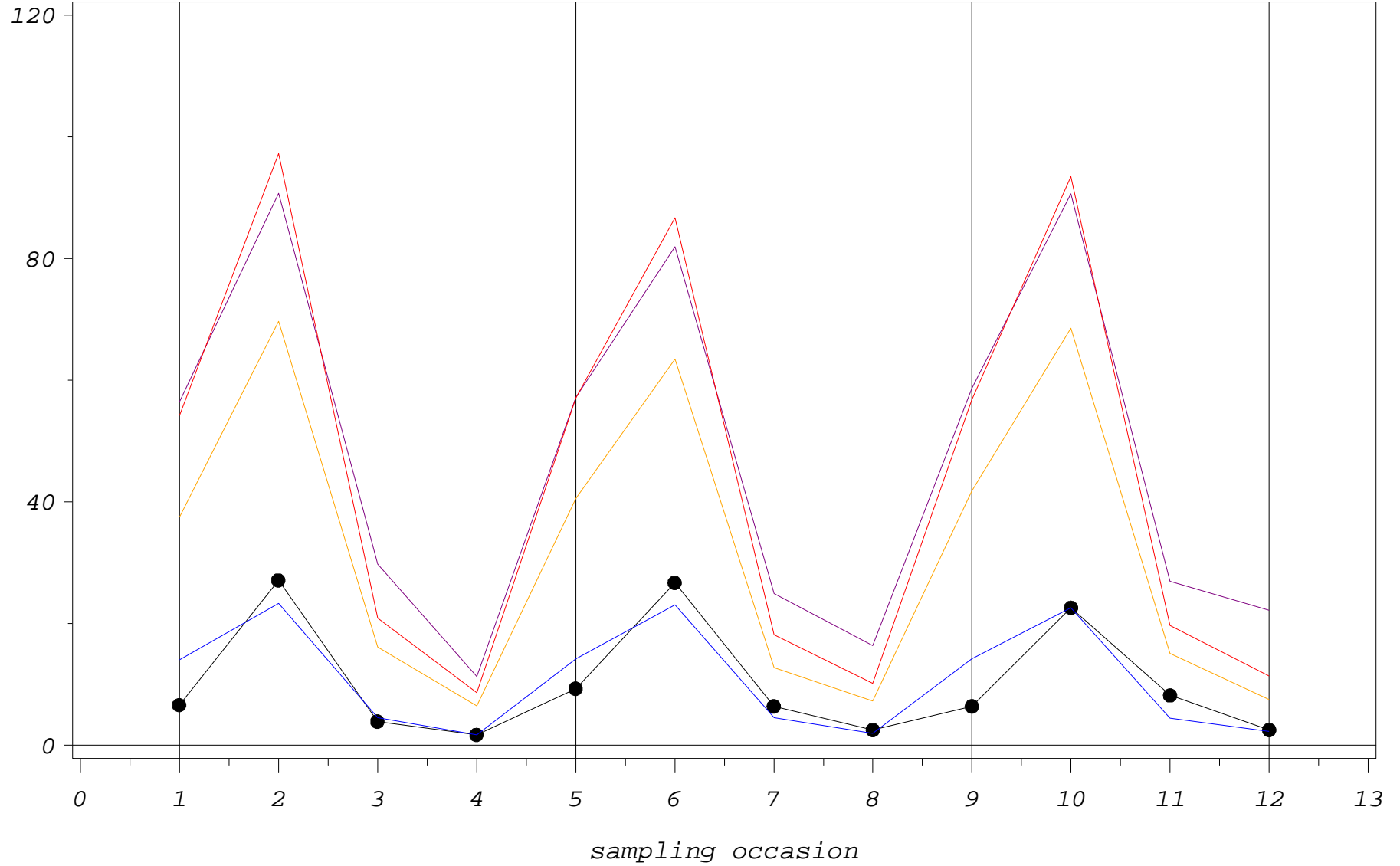
PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02405

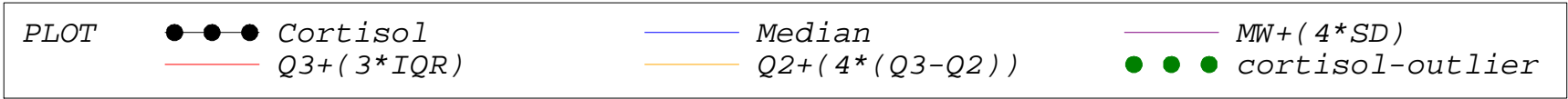
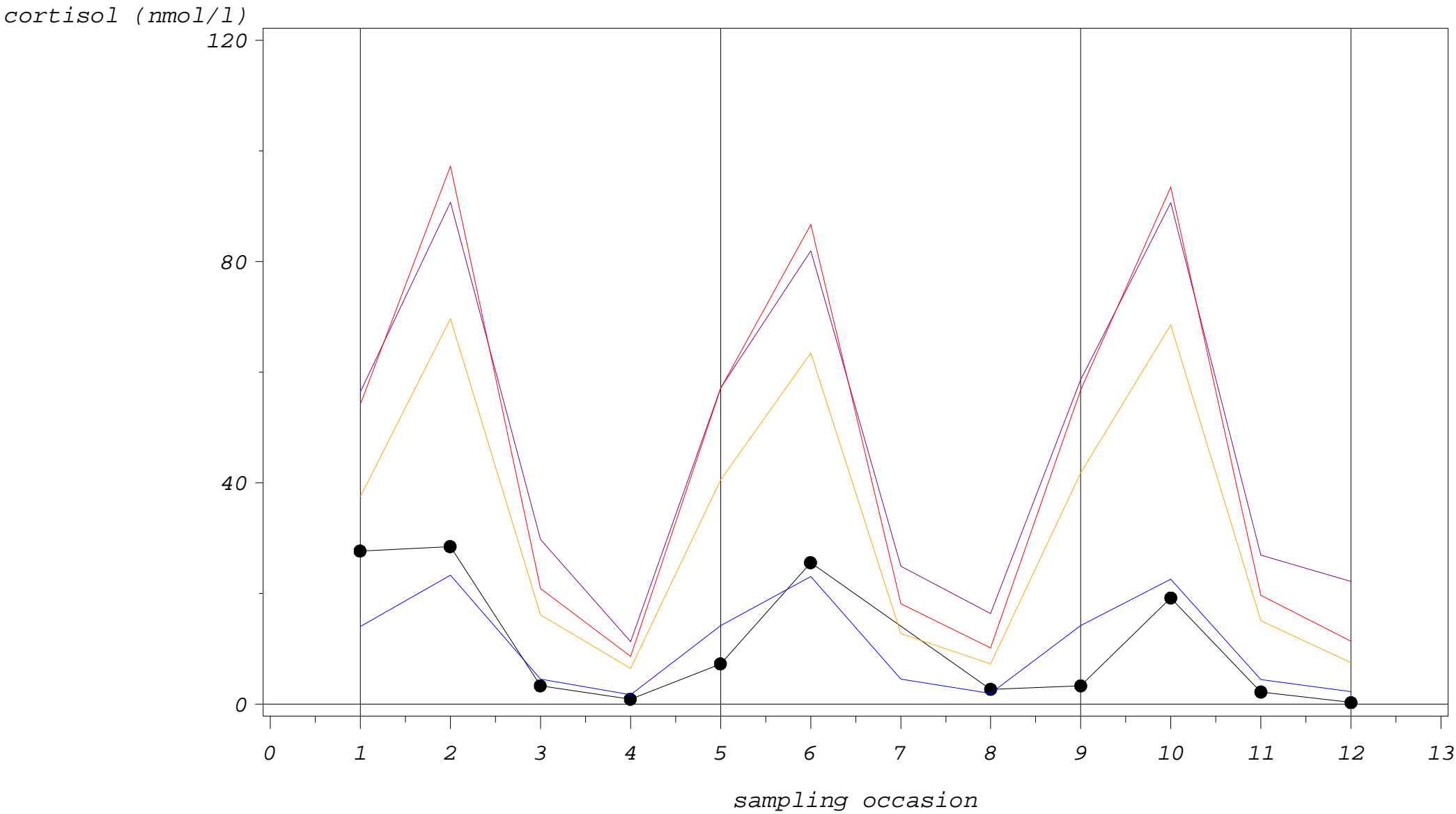
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

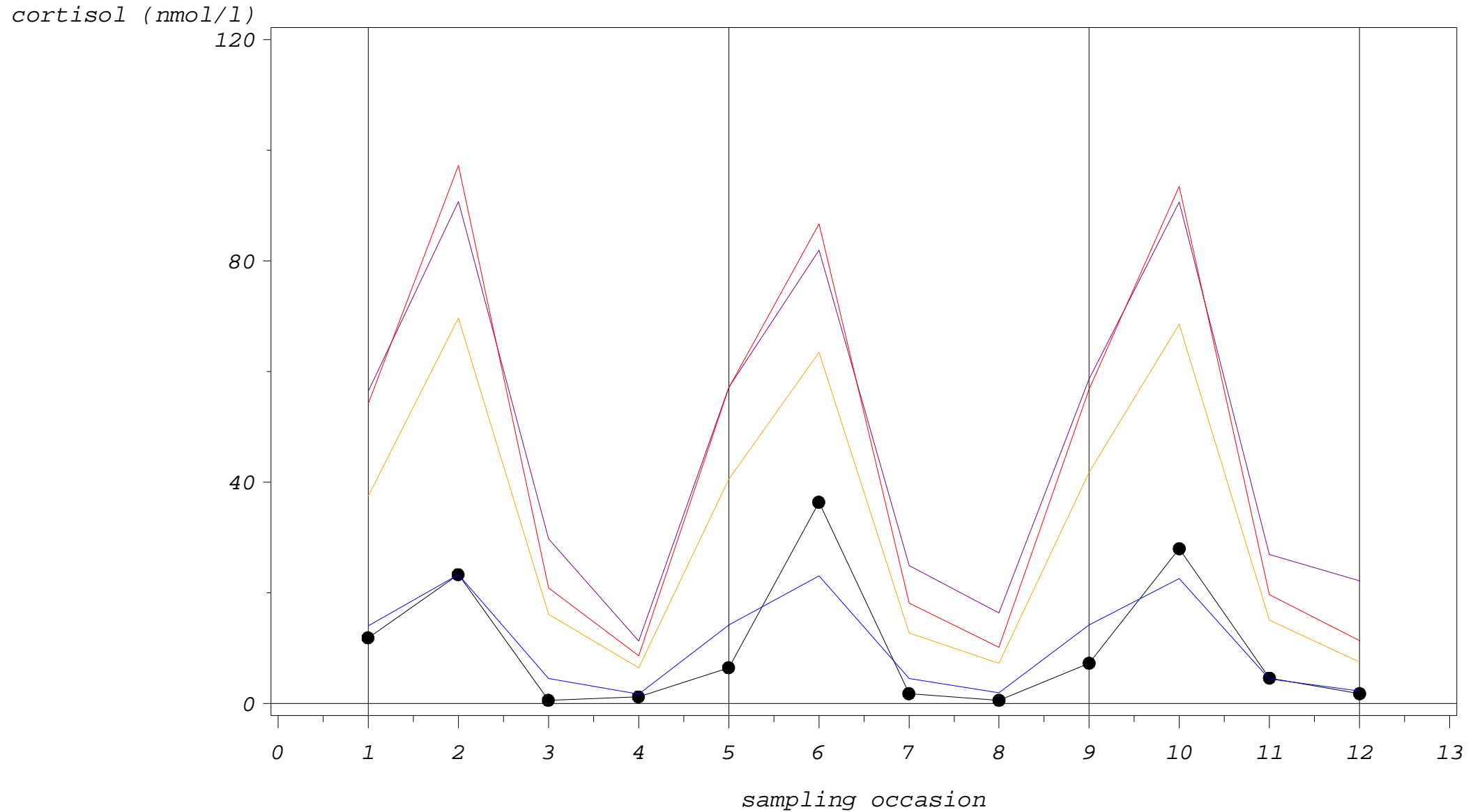
Study 2: cortisol single profiles with outlier fences

CODE=H02406



Study 2: cortisol single profiles with outlier fences

CODE=H02407



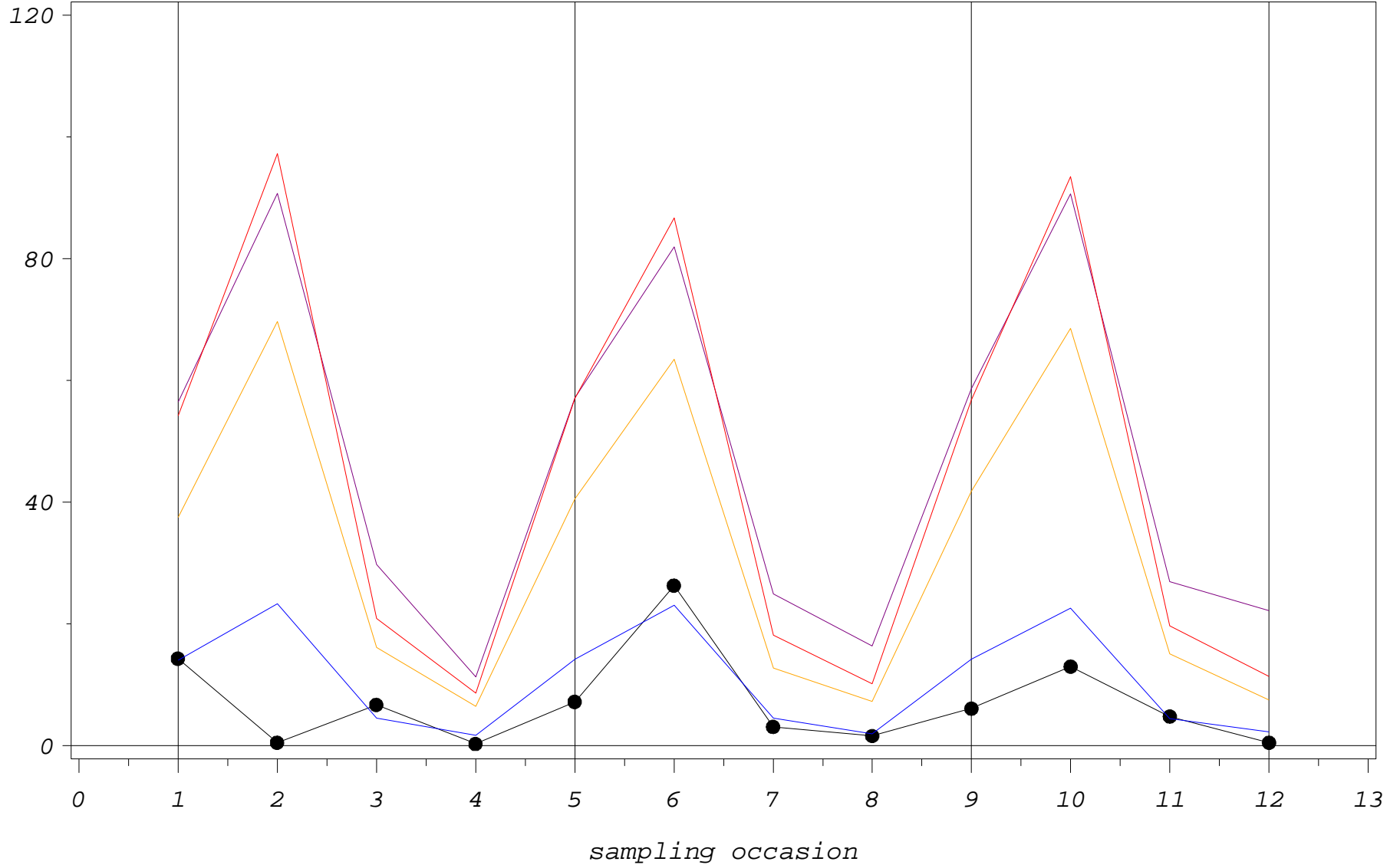
PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02408

cortisol (nmol/l)



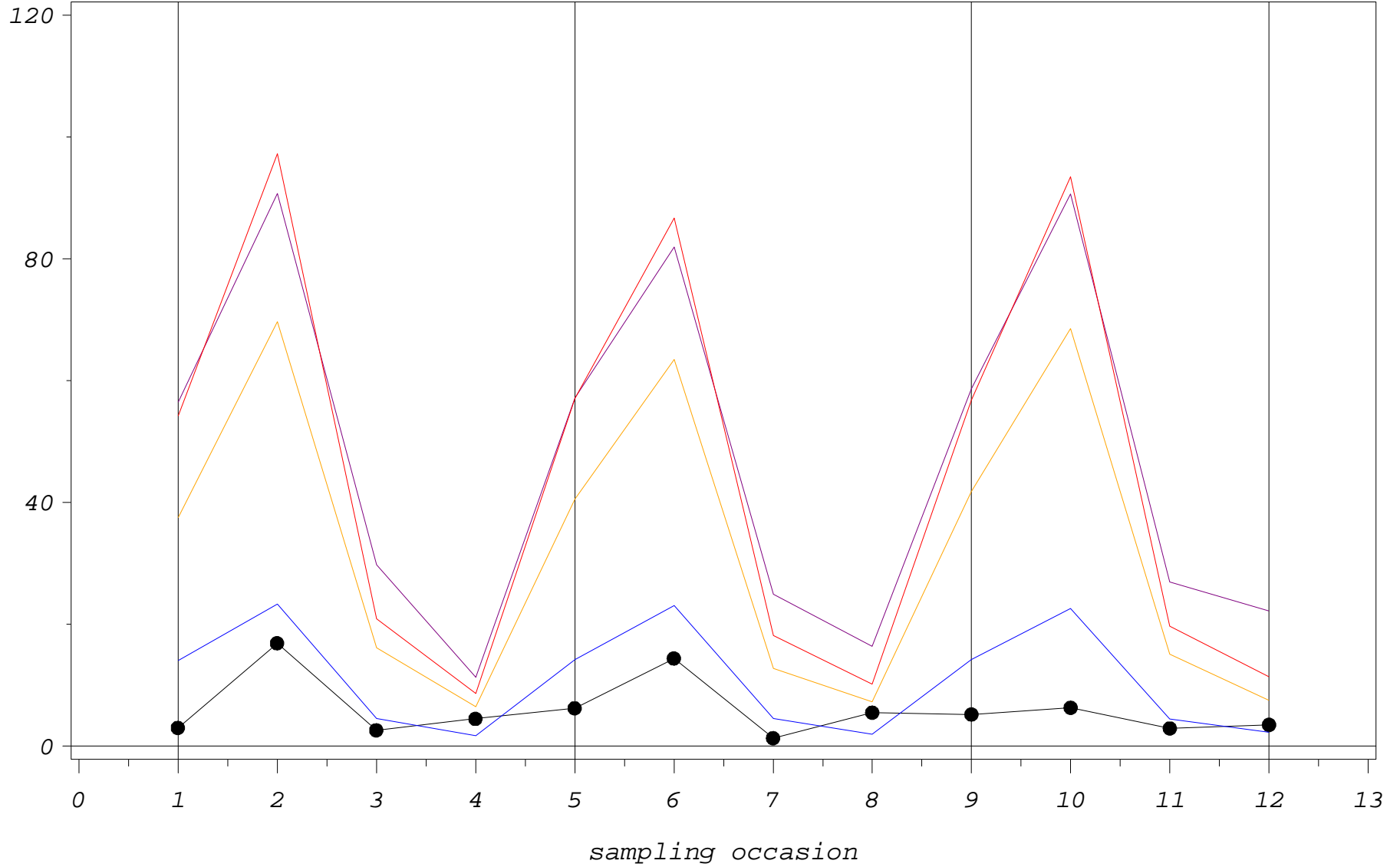
PLOT

●—●—●	Cortisol	—	Median	—	$MW+(4*SD)$
—	$Q3+(3*IQR)$	—	$Q2+(4*(Q3-Q2))$	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02409

cortisol (nmol/l)



PLOT

●—● Cortisol
— Q3+(3*IQR)

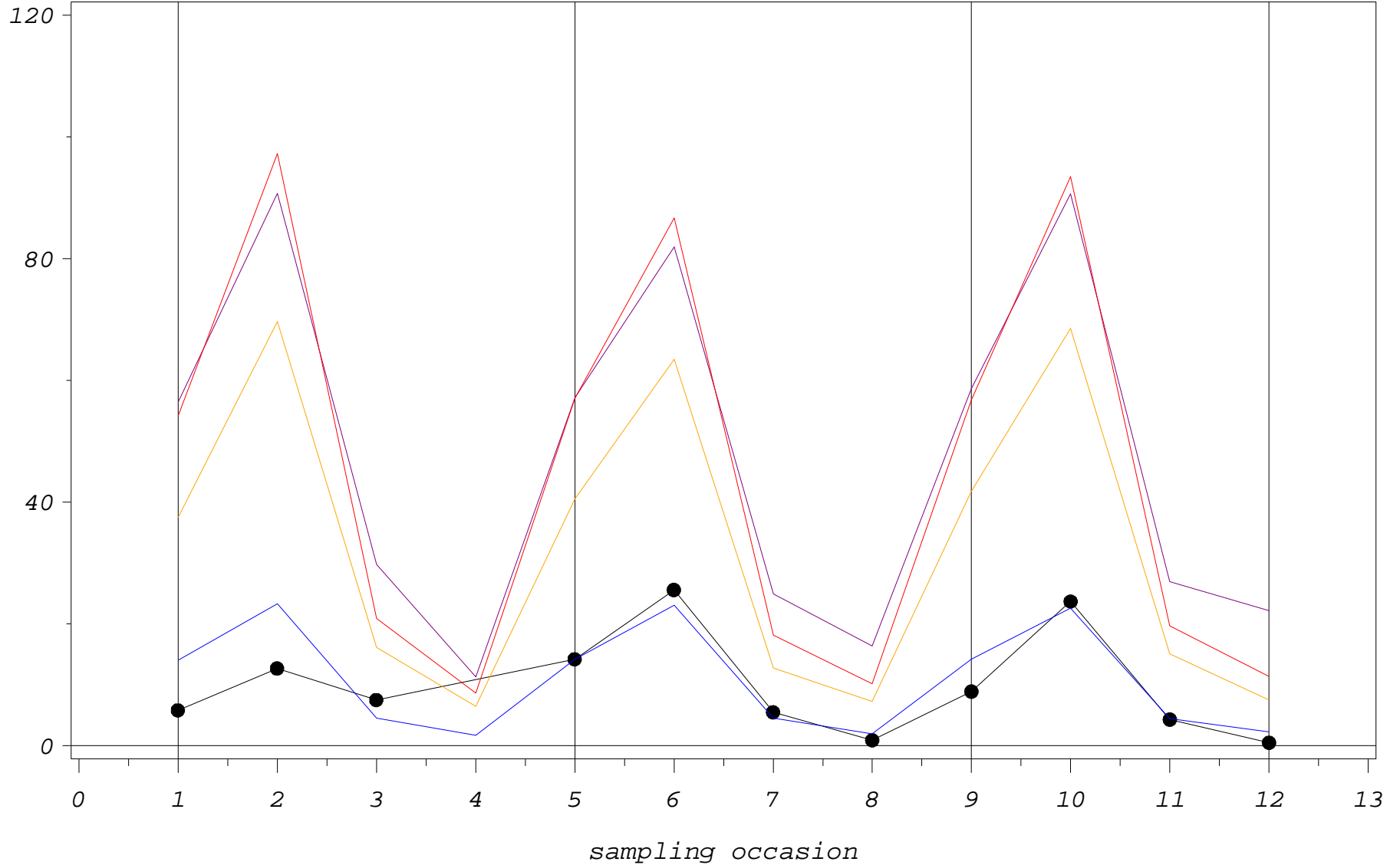
— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
●●● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02410

cortisol (nmol/l)



PLOT

●—● Cortisol
— Q3+(3*IQR)

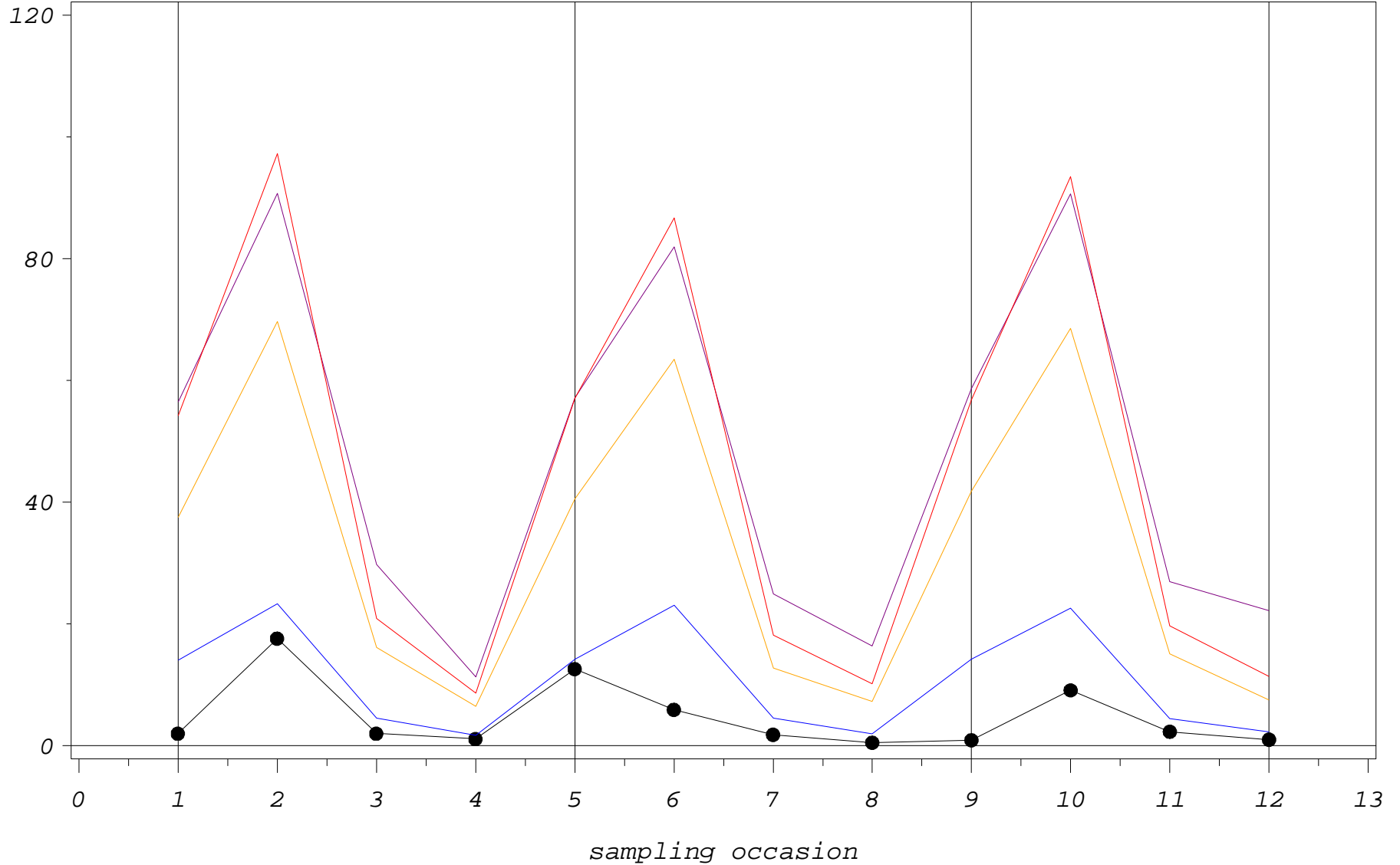
— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
●●● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02411

cortisol (nmol/l)

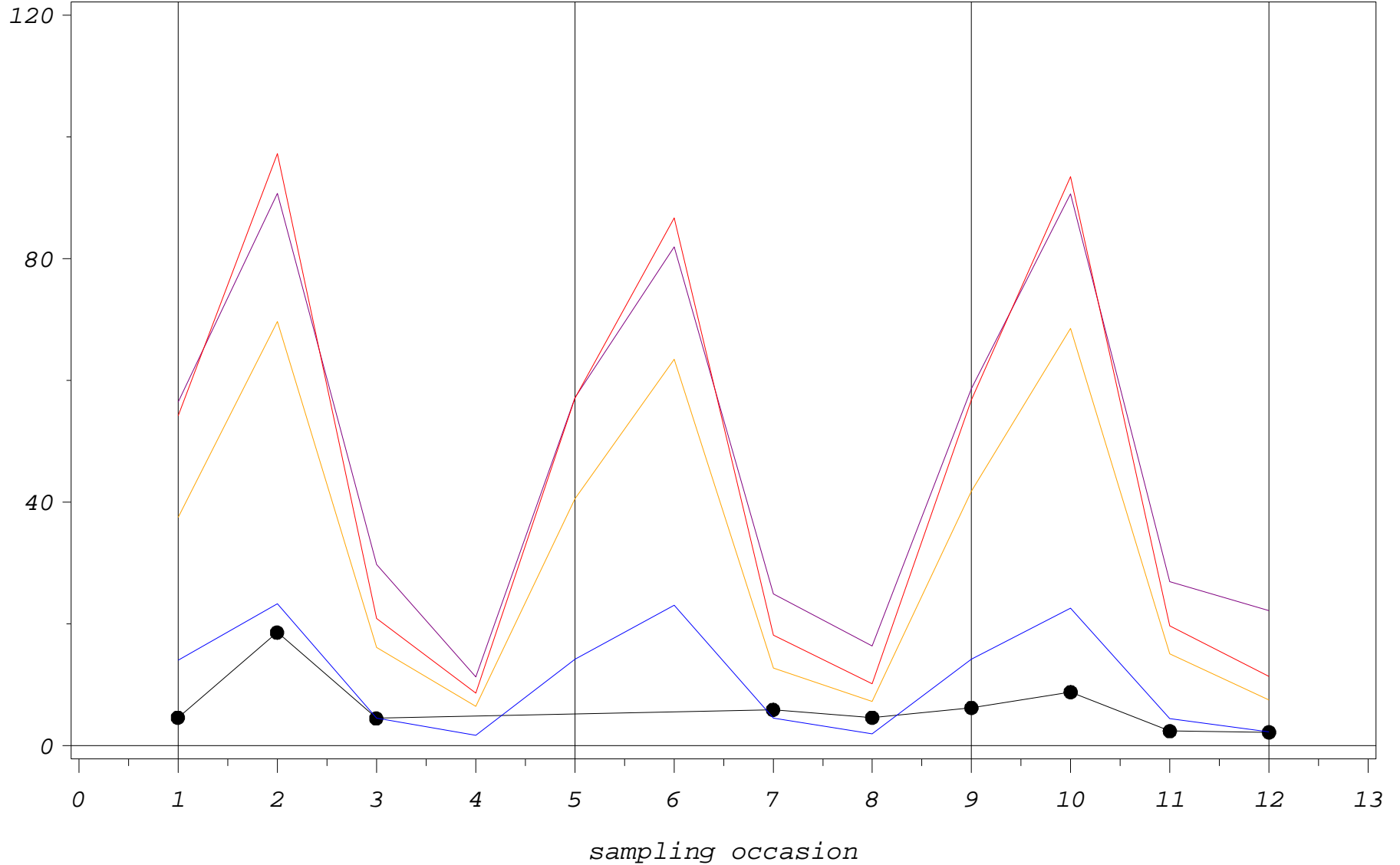


PLOT ●—●—● Cortisol — Median — $MW + (4 * SD)$
 — $Q3 + (3 * IQR)$ — $Q2 + (4 * (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02412

cortisol (nmol/l)



PLOT

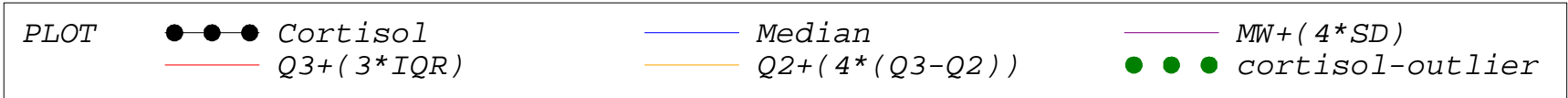
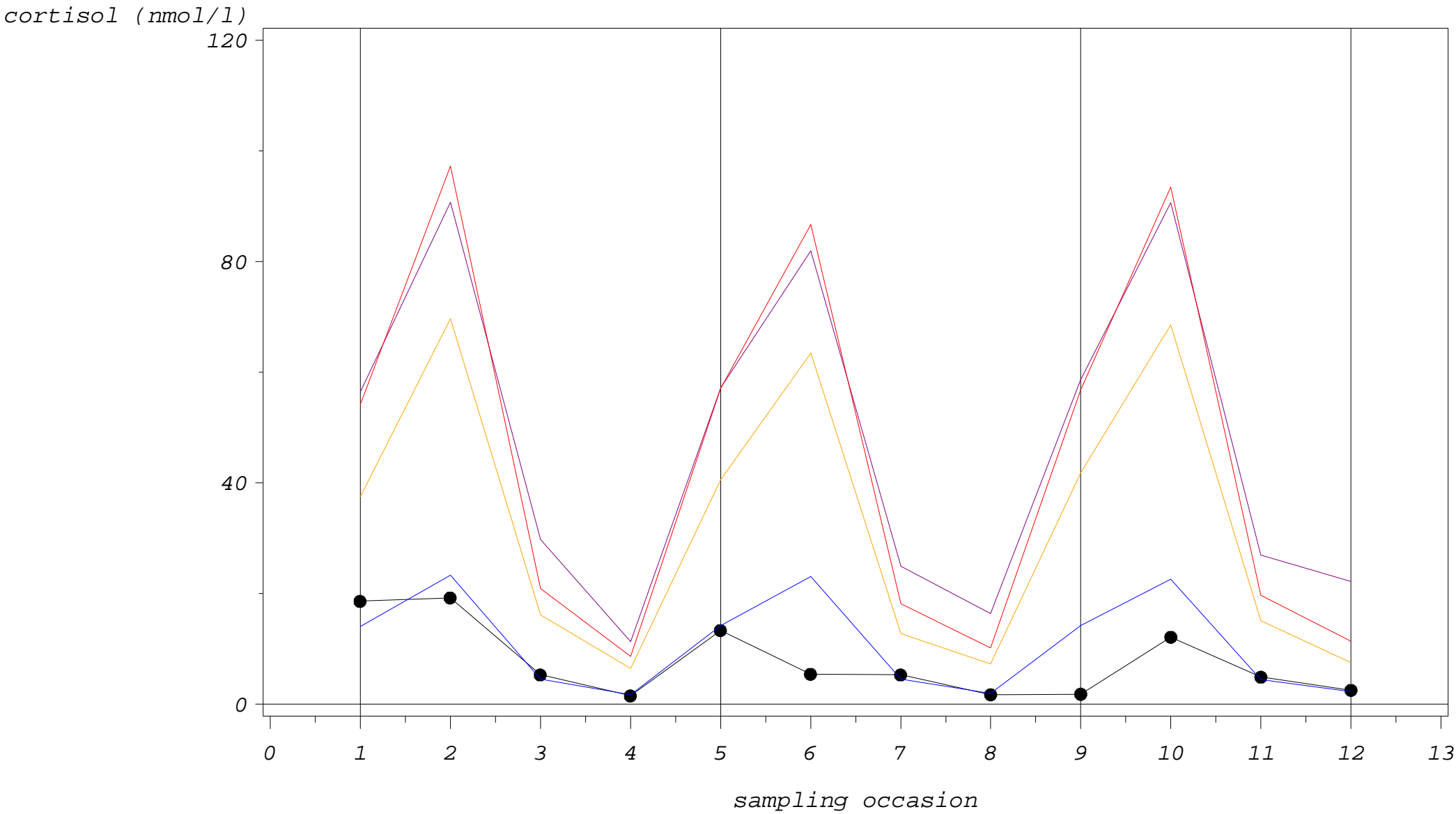
●—●—● Cortisol
— Q3+(3*IQR)

— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
● ● ● cortisol-outlier

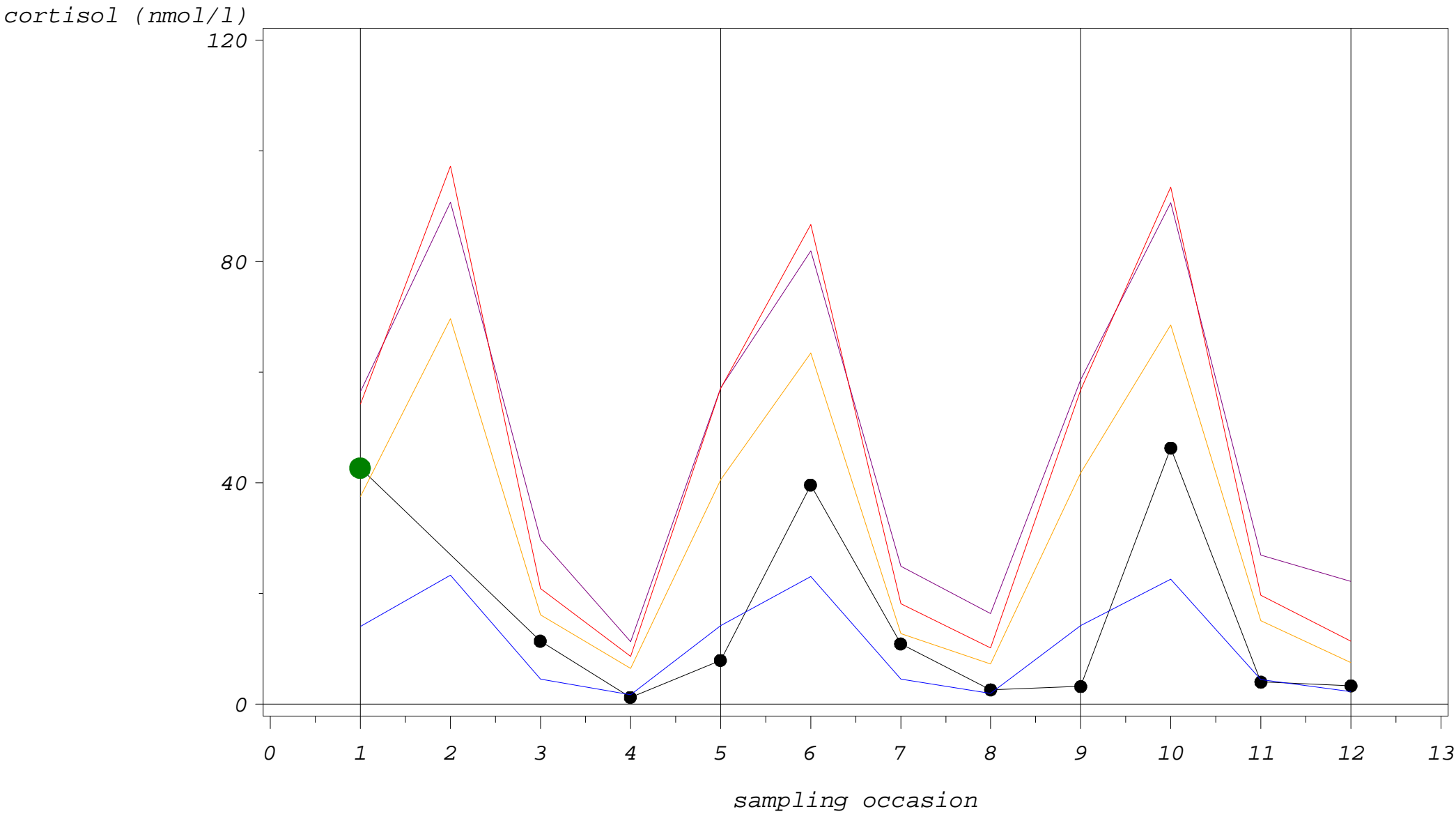
Study 2: cortisol single profiles with outlier fences

CODE=H02413



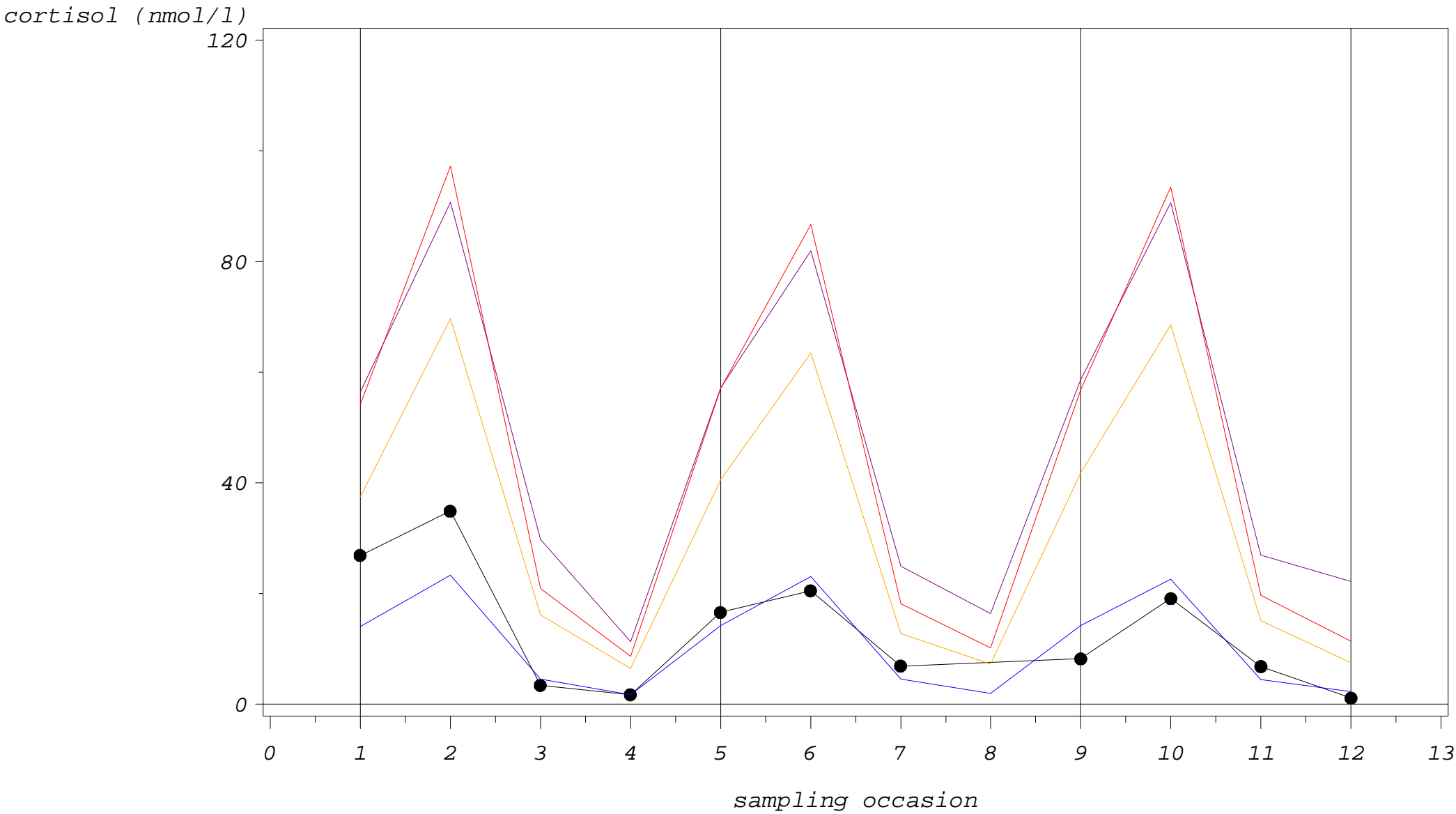
Study 2: cortisol single profiles with outlier fences

CODE=H02415



Study 2: cortisol single profiles with outlier fences

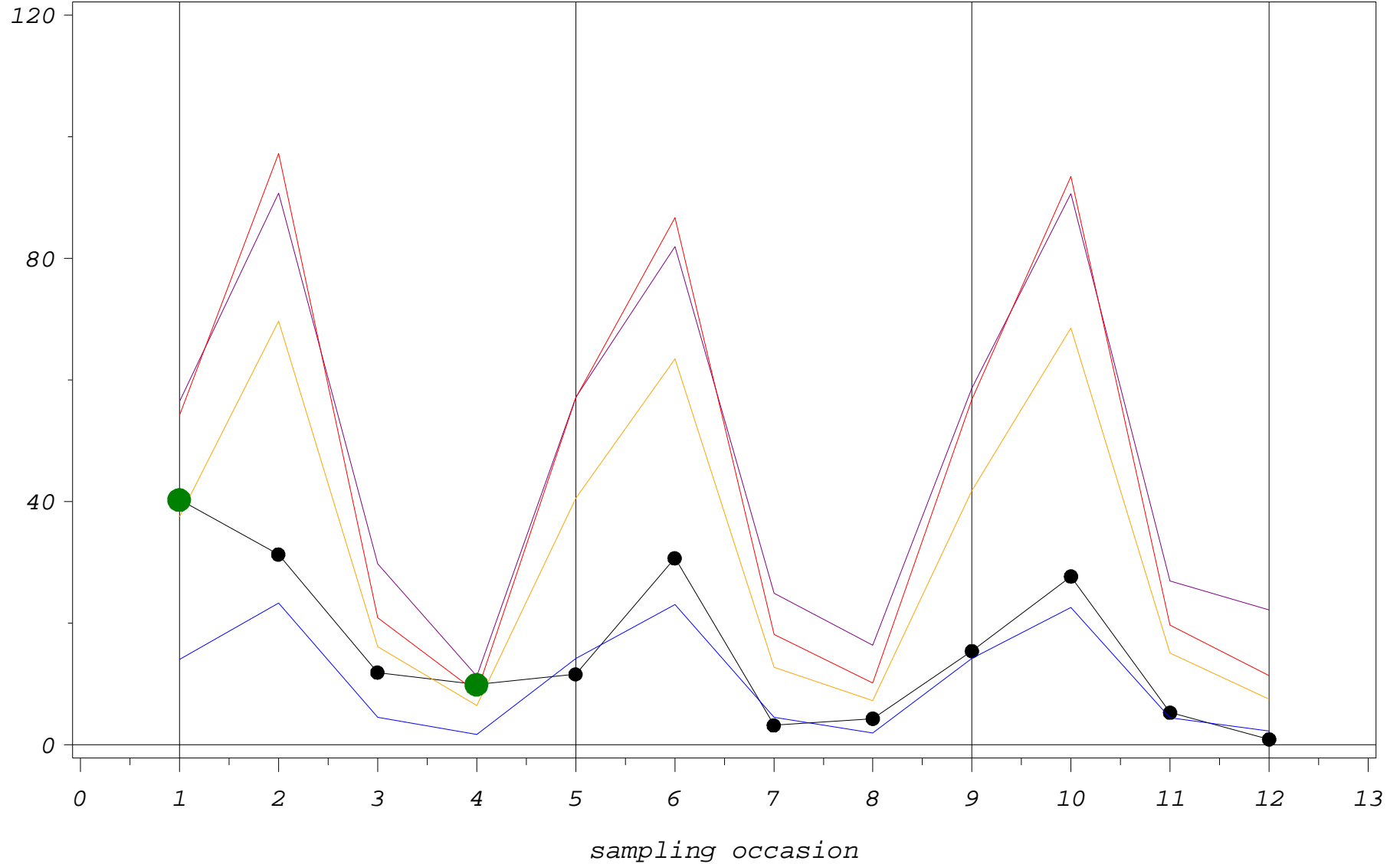
CODE=H02416



Study 2: cortisol single profiles with outlier fences

CODE=H02417

cortisol (nmol/l)

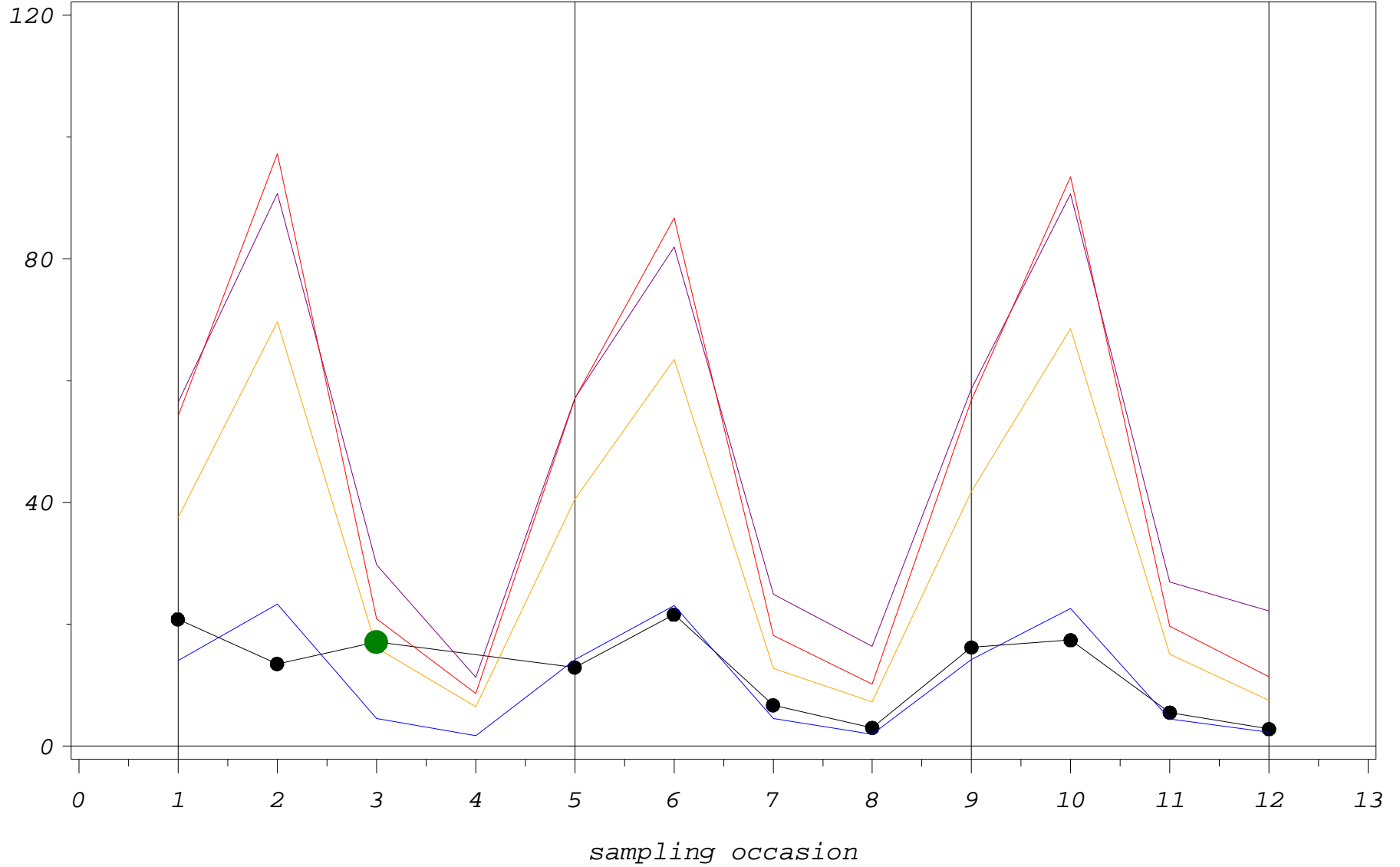


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02418

cortisol (nmol/l)



PLOT

●—●—● Cortisol
— Q3+(3*IQR)

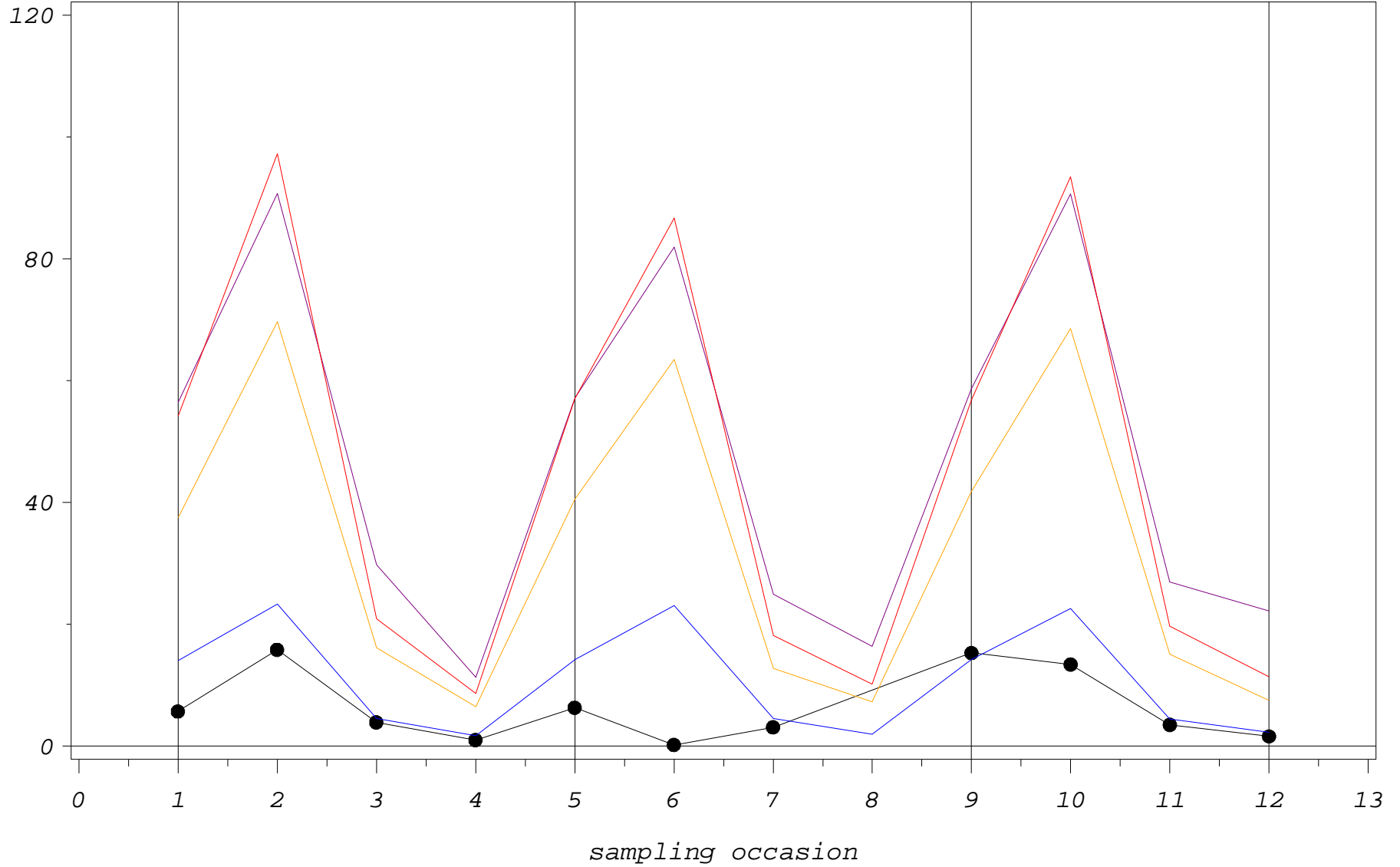
— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02501

cortisol (nmol/l)



PLOT

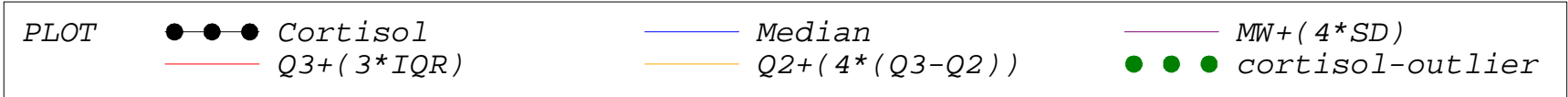
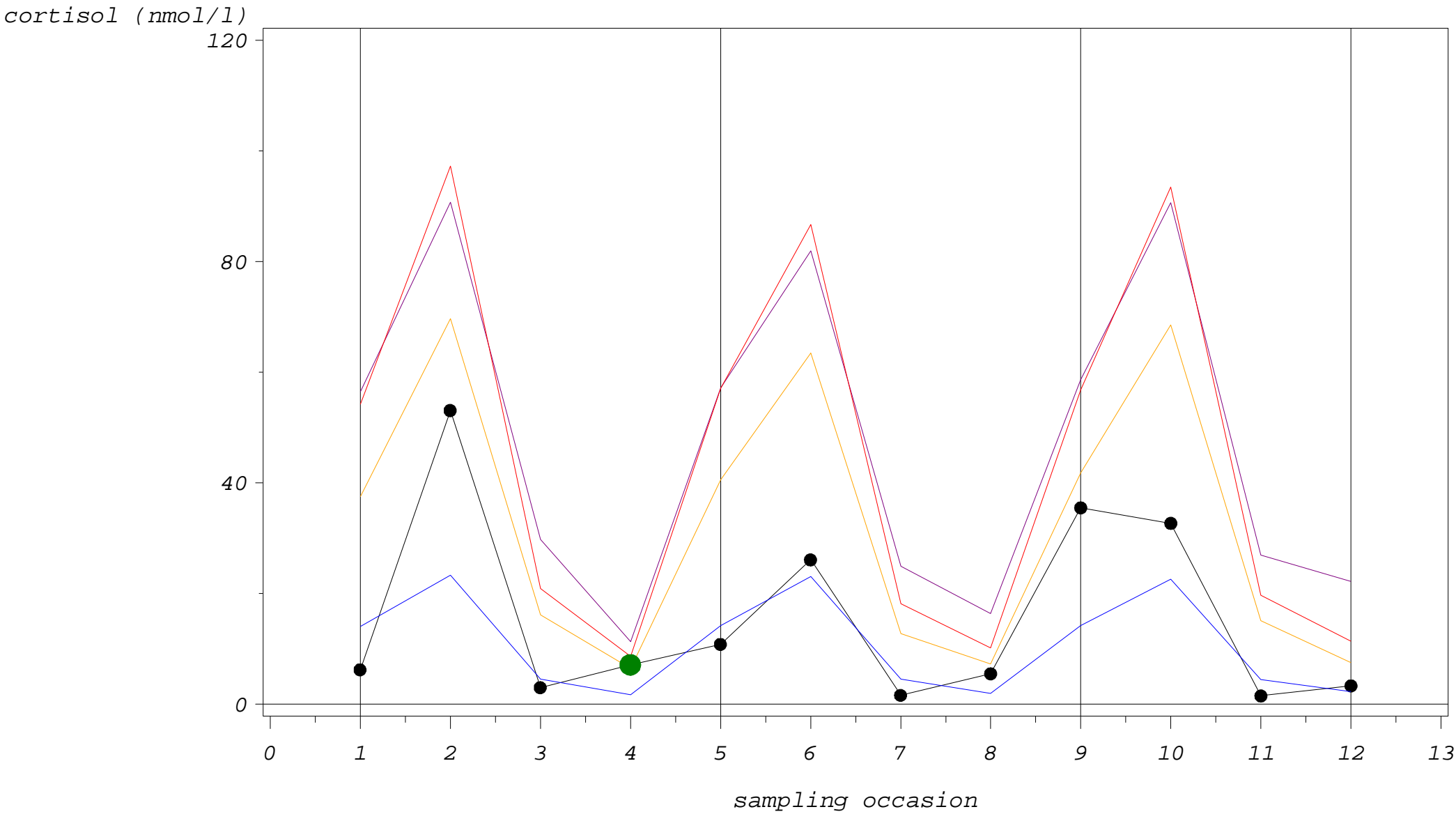
●—● Cortisol
— Q3+(3*IQR)

— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
●●● cortisol-outlier

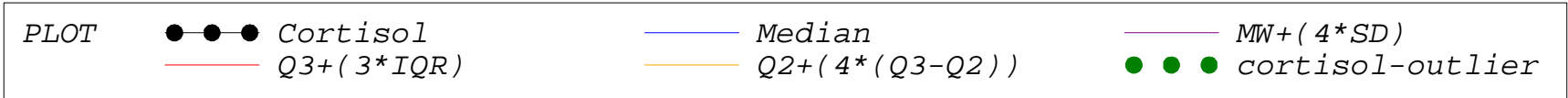
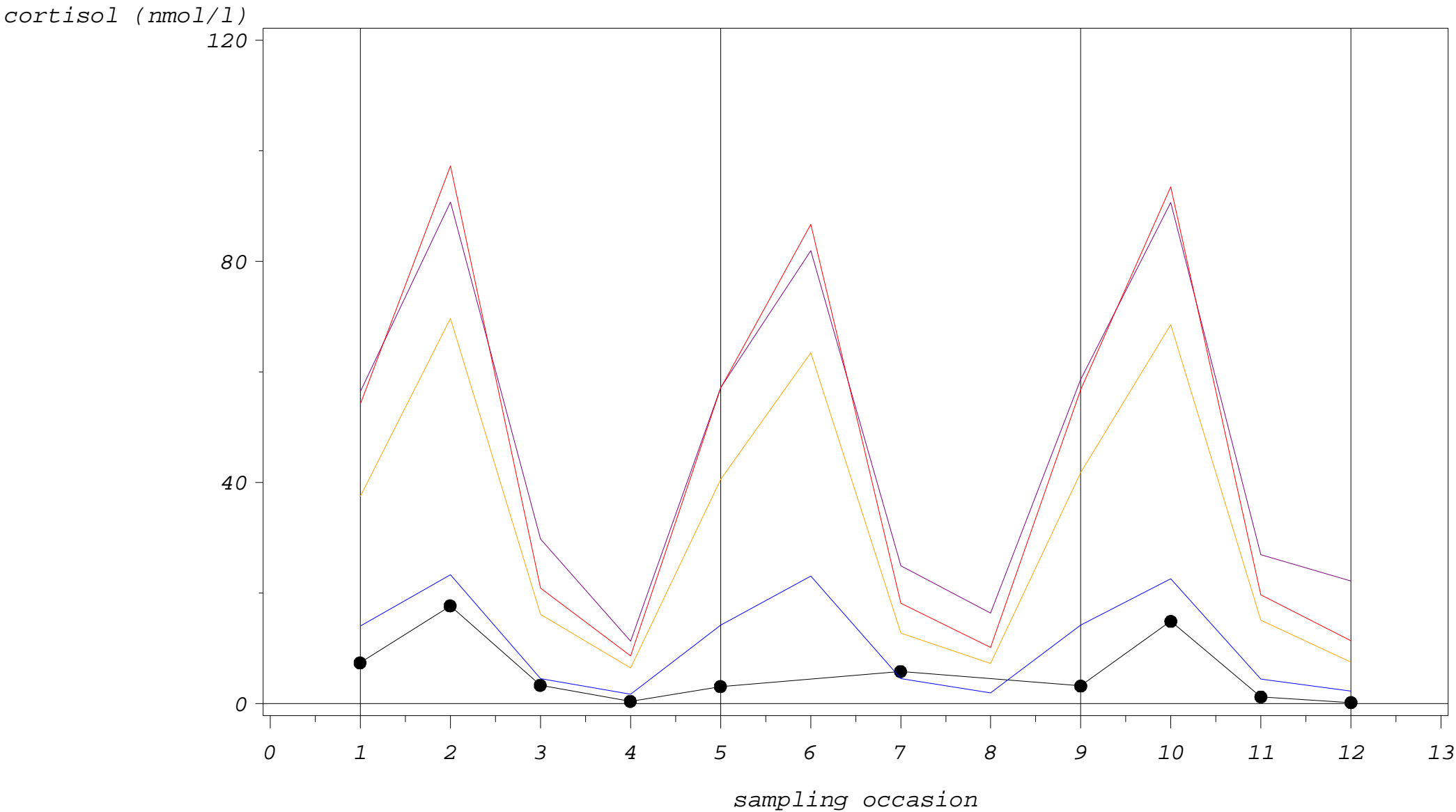
Study 2: cortisol single profiles with outlier fences

CODE=H02503



Study 2: cortisol single profiles with outlier fences

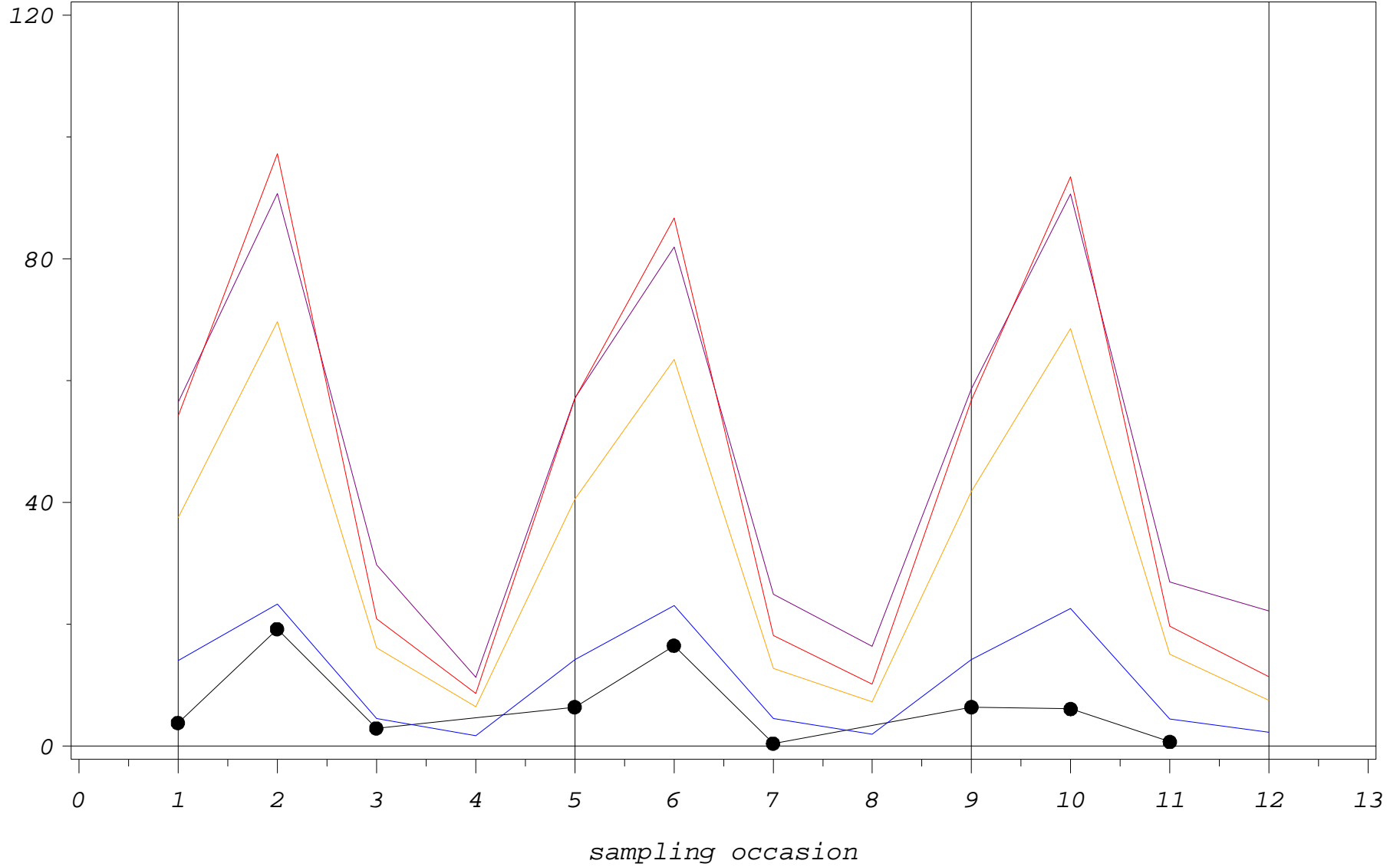
CODE=H02504



Study 2: cortisol single profiles with outlier fences

CODE=H02505

cortisol (nmol/l)

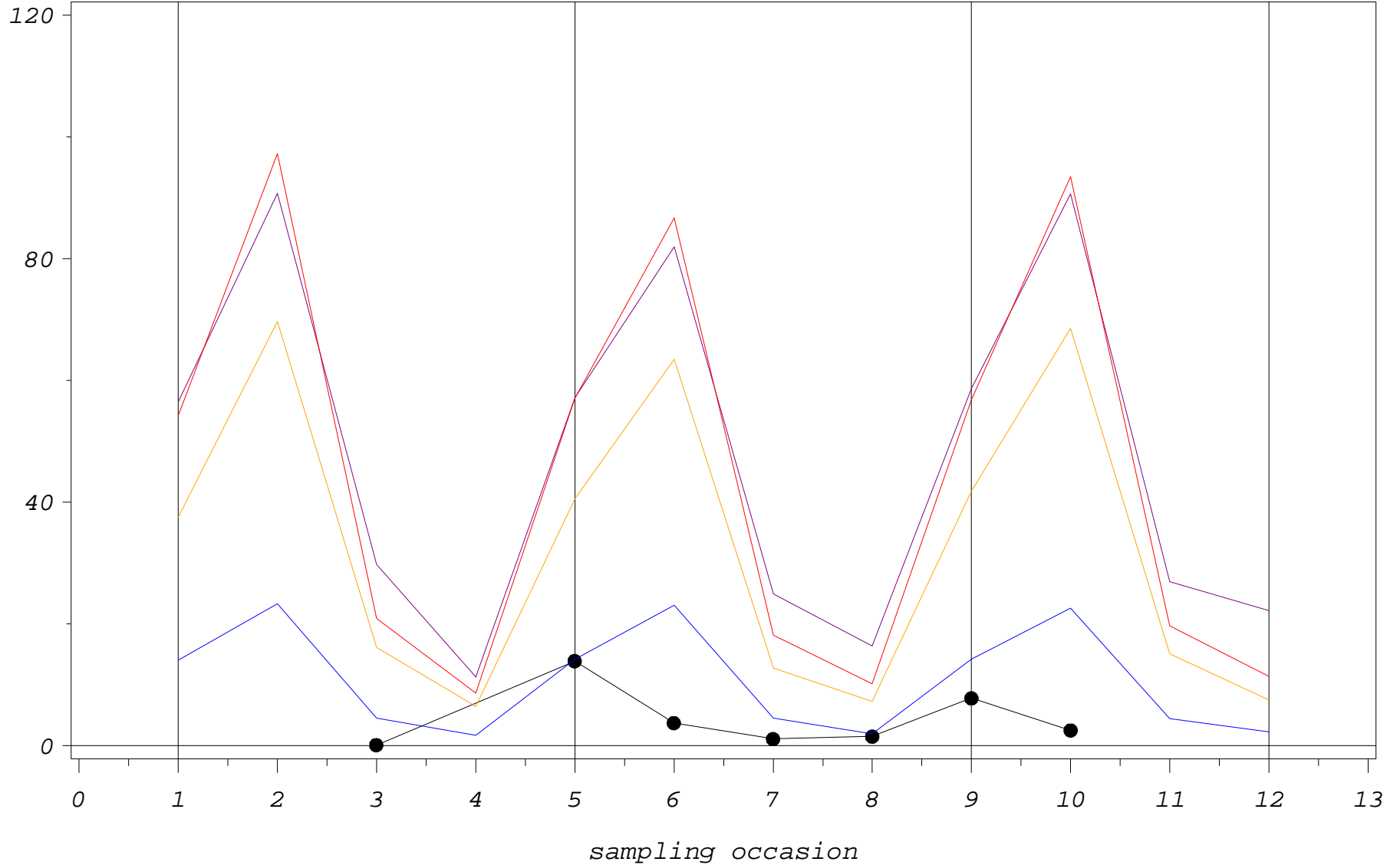


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02506

cortisol (nmol/l)

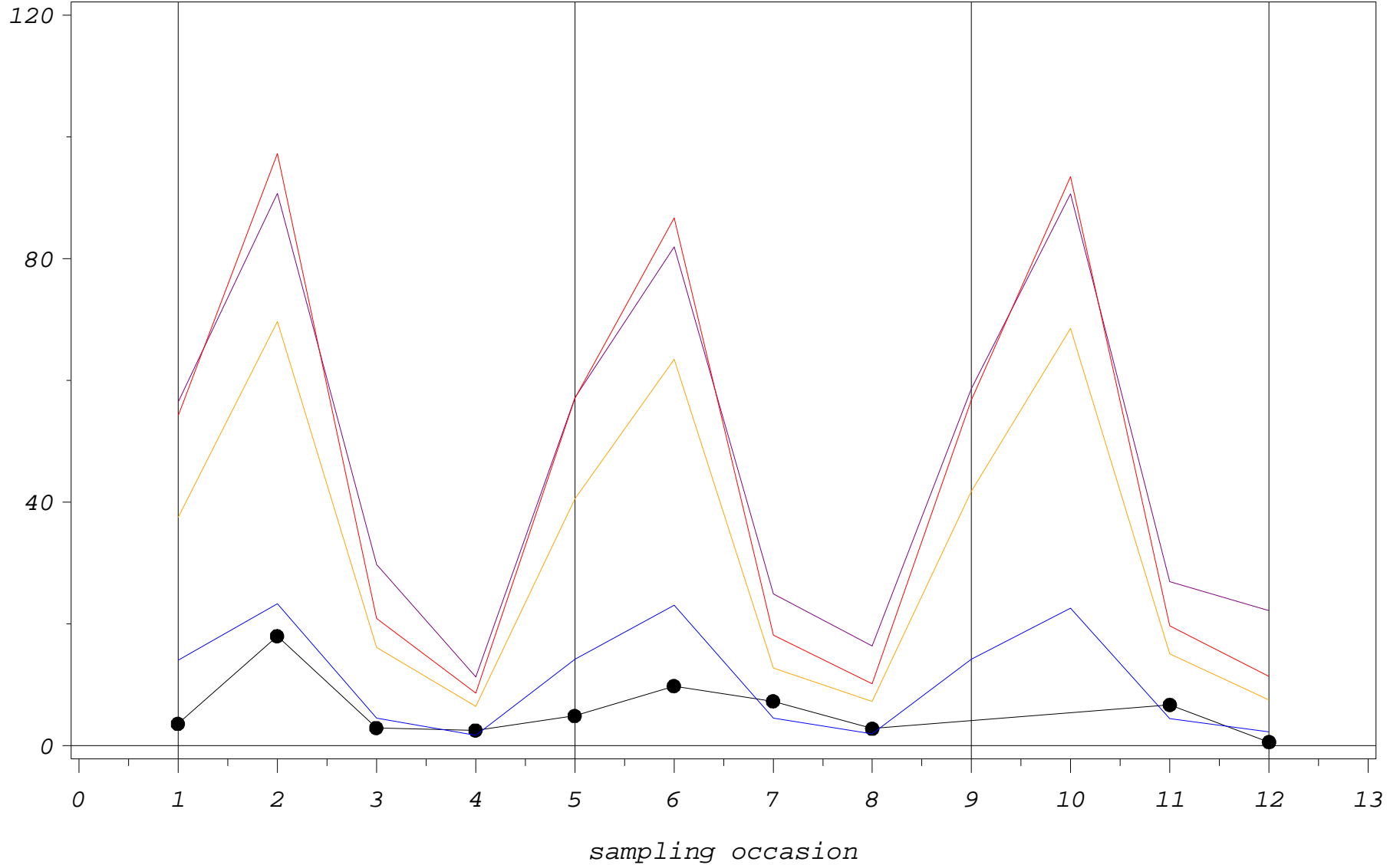


PLOT	●—●—●	Cortisol	—	Median	—	MW+(4*SD)
	—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02507

cortisol (nmol/l)

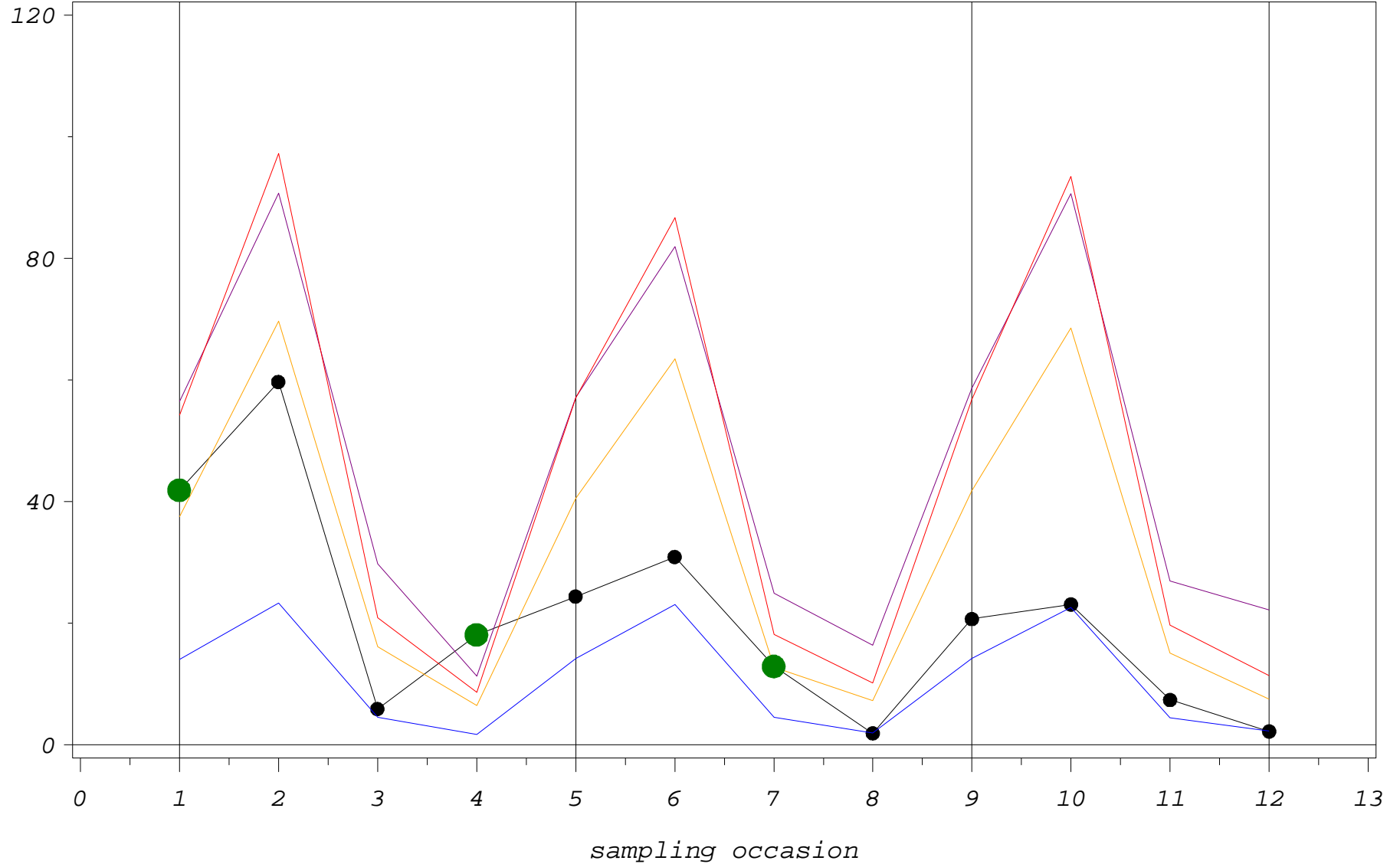


PLOT ●—●—● Cortisol — Median — $MW + (4 * SD)$
 — $Q3 + (3 * IQR)$ — $Q2 + (4 * (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02510

cortisol (nmol/l)



PLOT

●—● Cortisol
— $Q3+(3*IQR)$

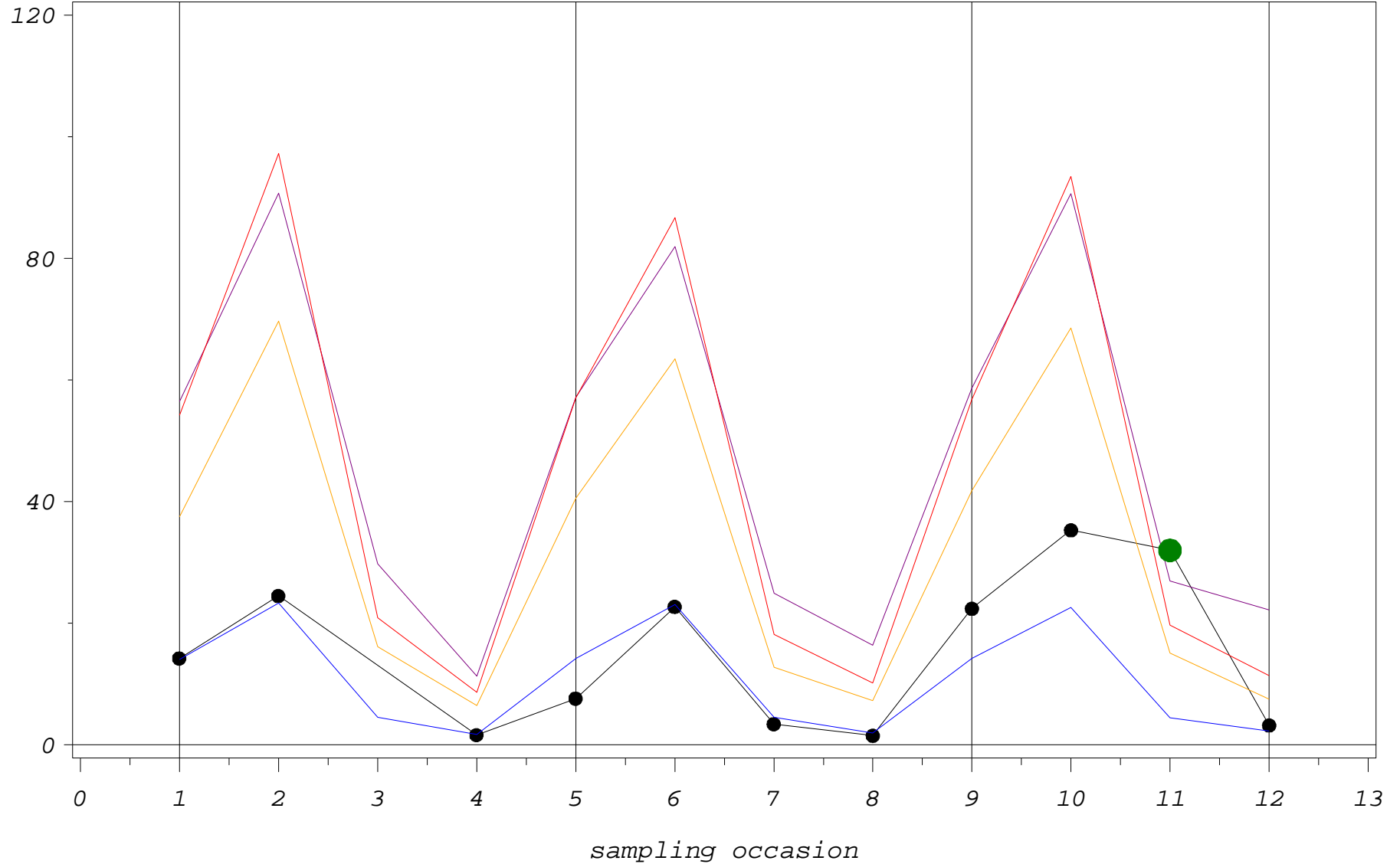
— Median
— $Q2+(4*(Q3-Q2))$

— $MW+(4*SD)$
● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02513

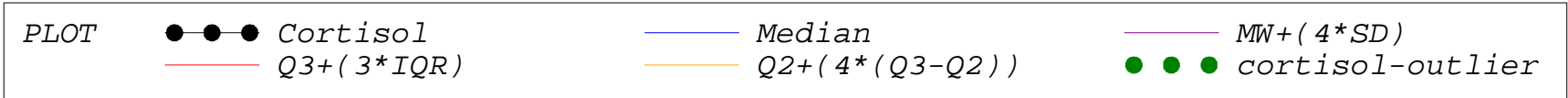
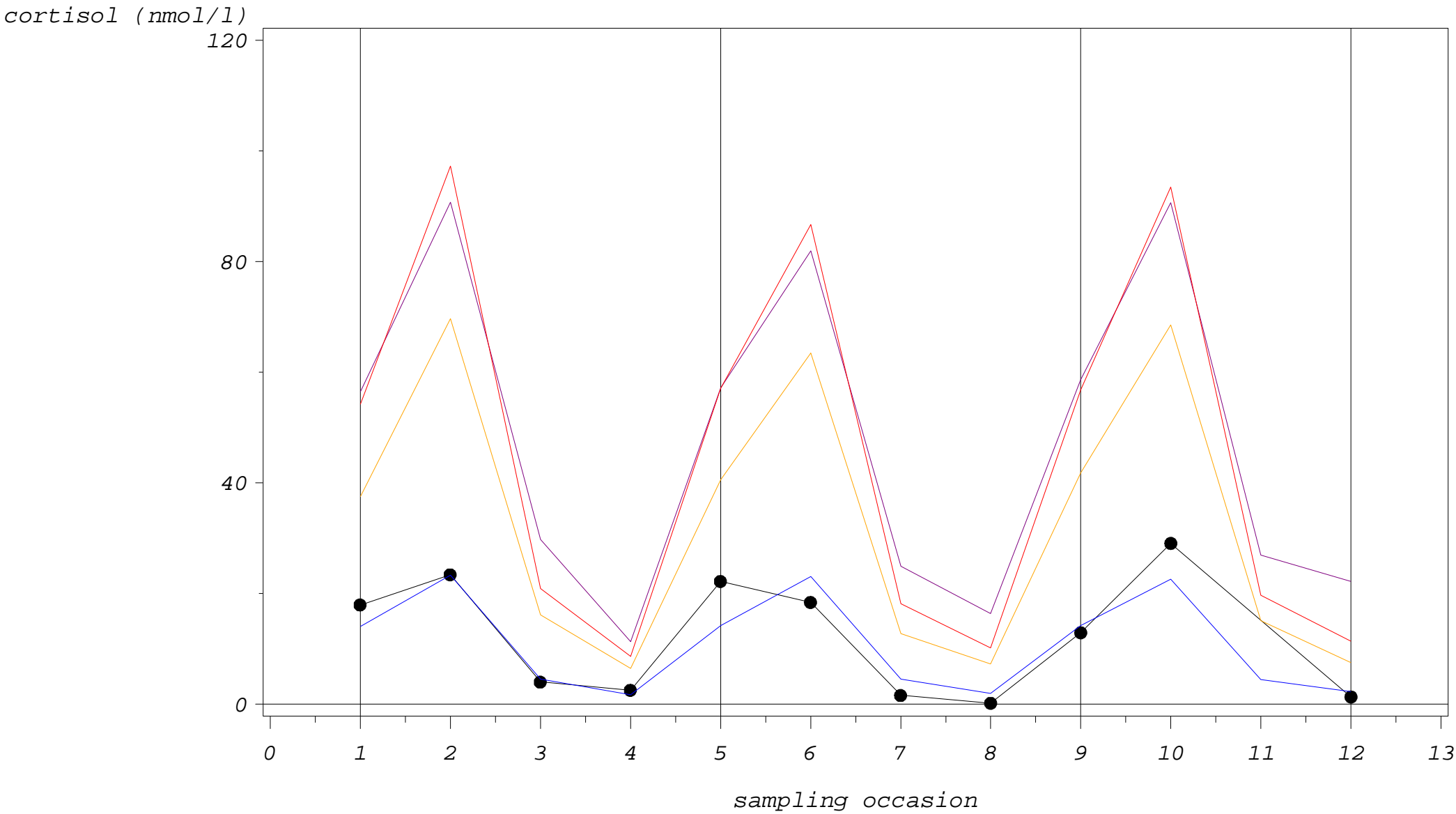
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 \cdot SD)$
 — $Q3 + (3 \cdot IQR)$ — $Q2 + (4 \cdot (Q3 - Q2))$ ● ● ● cortisol-outlier

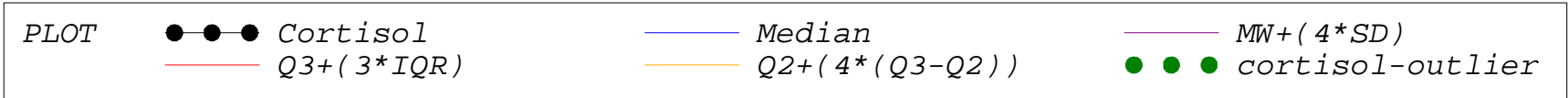
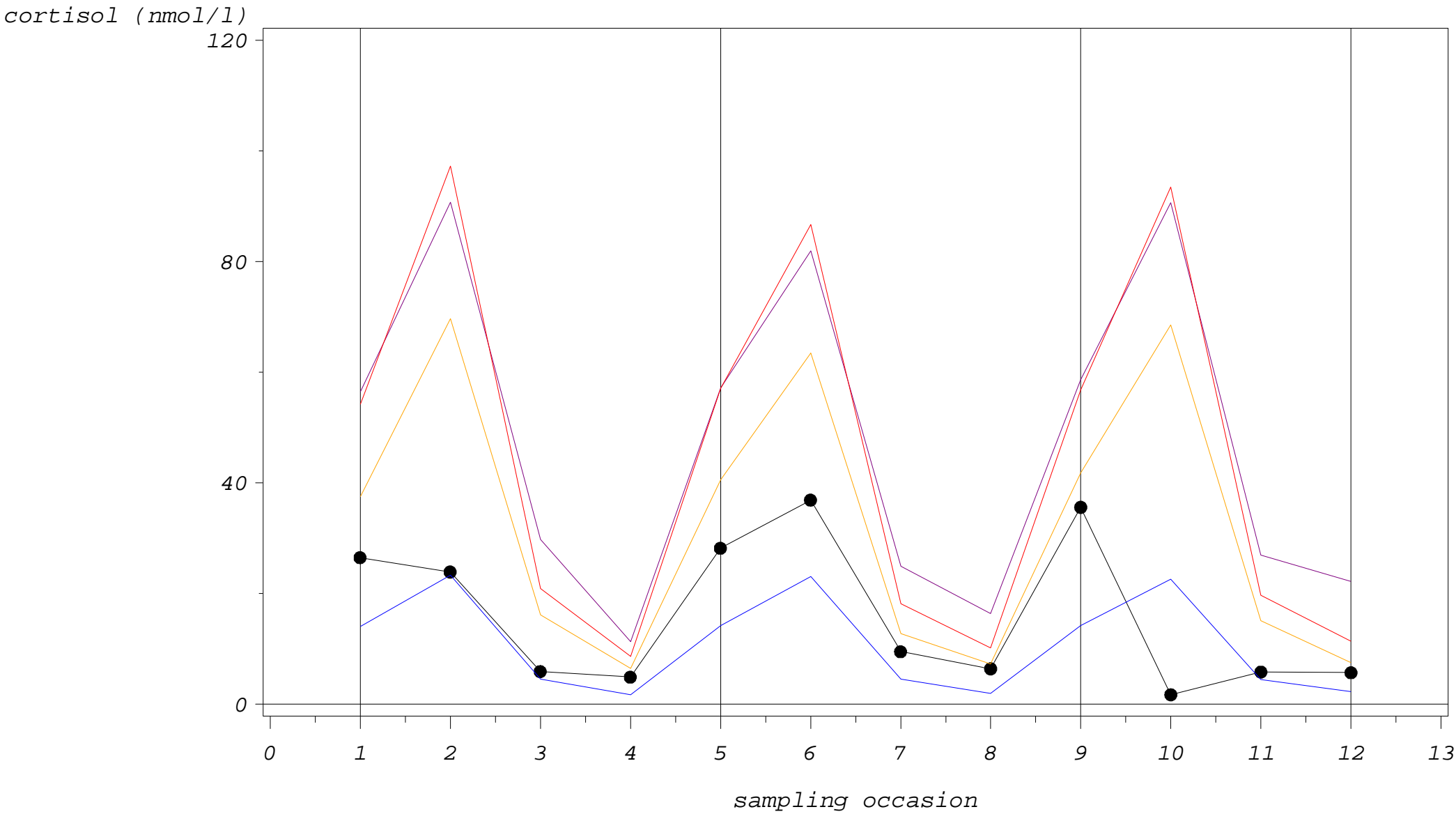
Study 2: cortisol single profiles with outlier fences

CODE=H02514



Study 2: cortisol single profiles with outlier fences

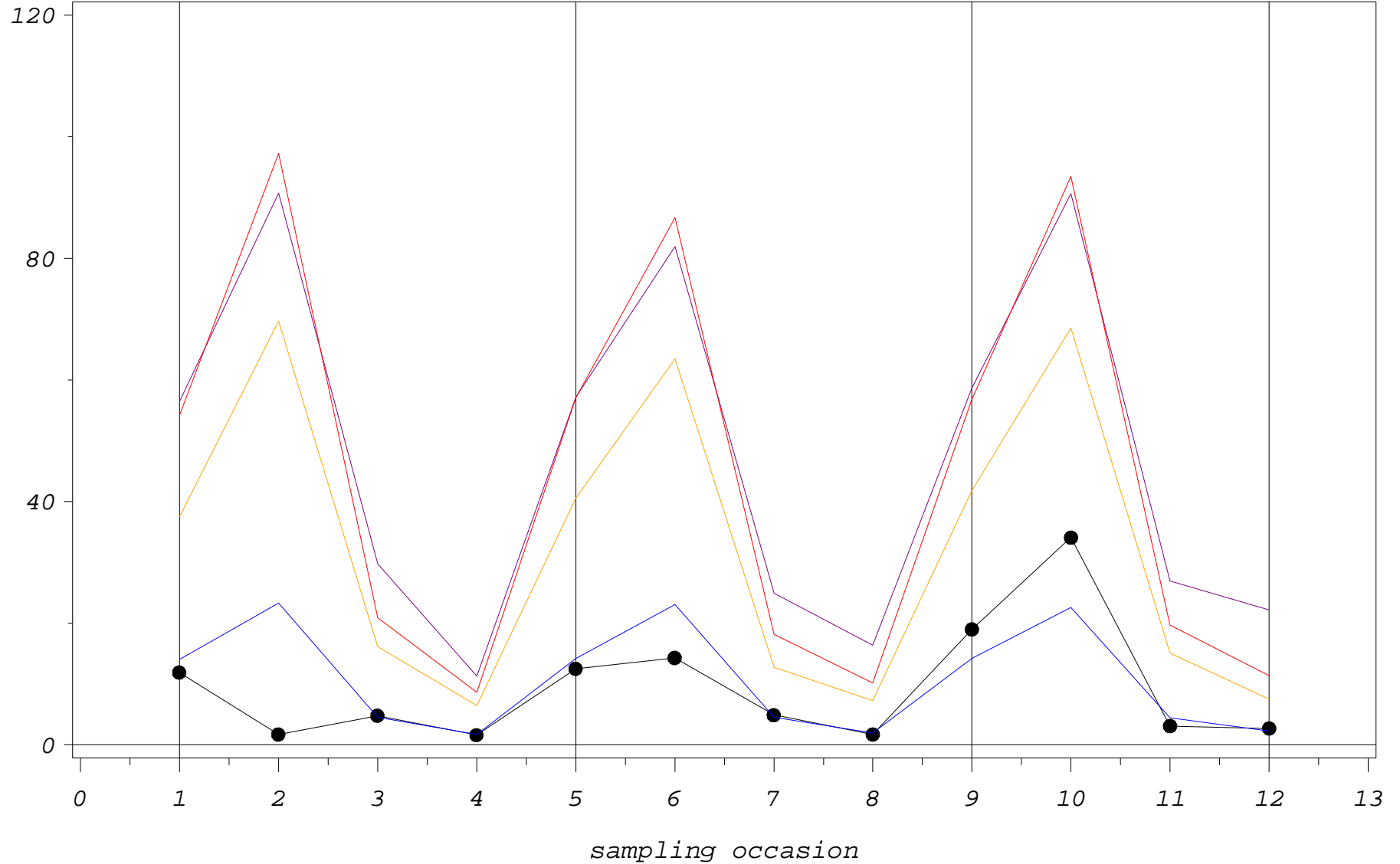
CODE=H02515



Study 2: cortisol single profiles with outlier fences

CODE=H02516

cortisol (nmol/l)

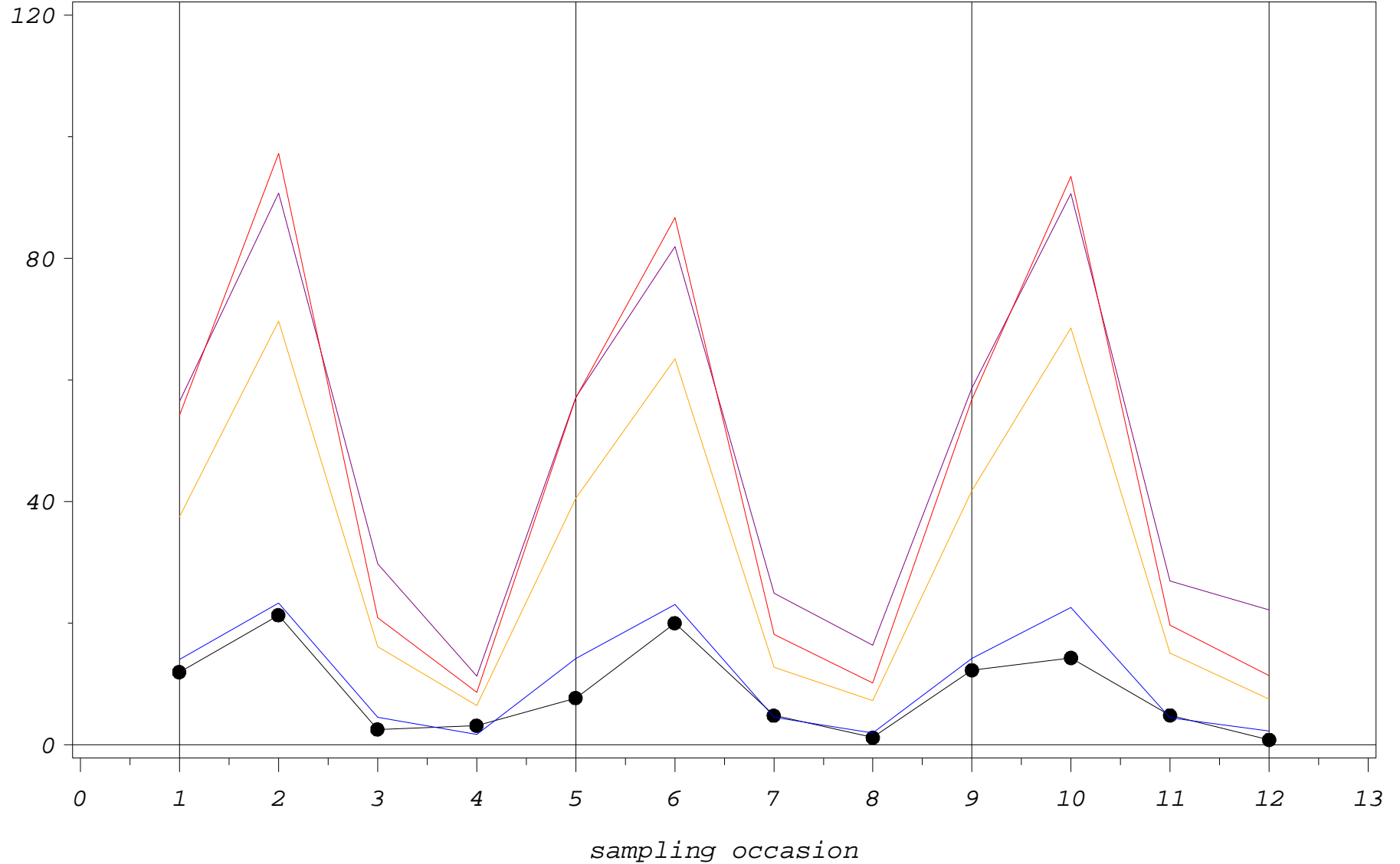


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02517

cortisol (nmol/l)

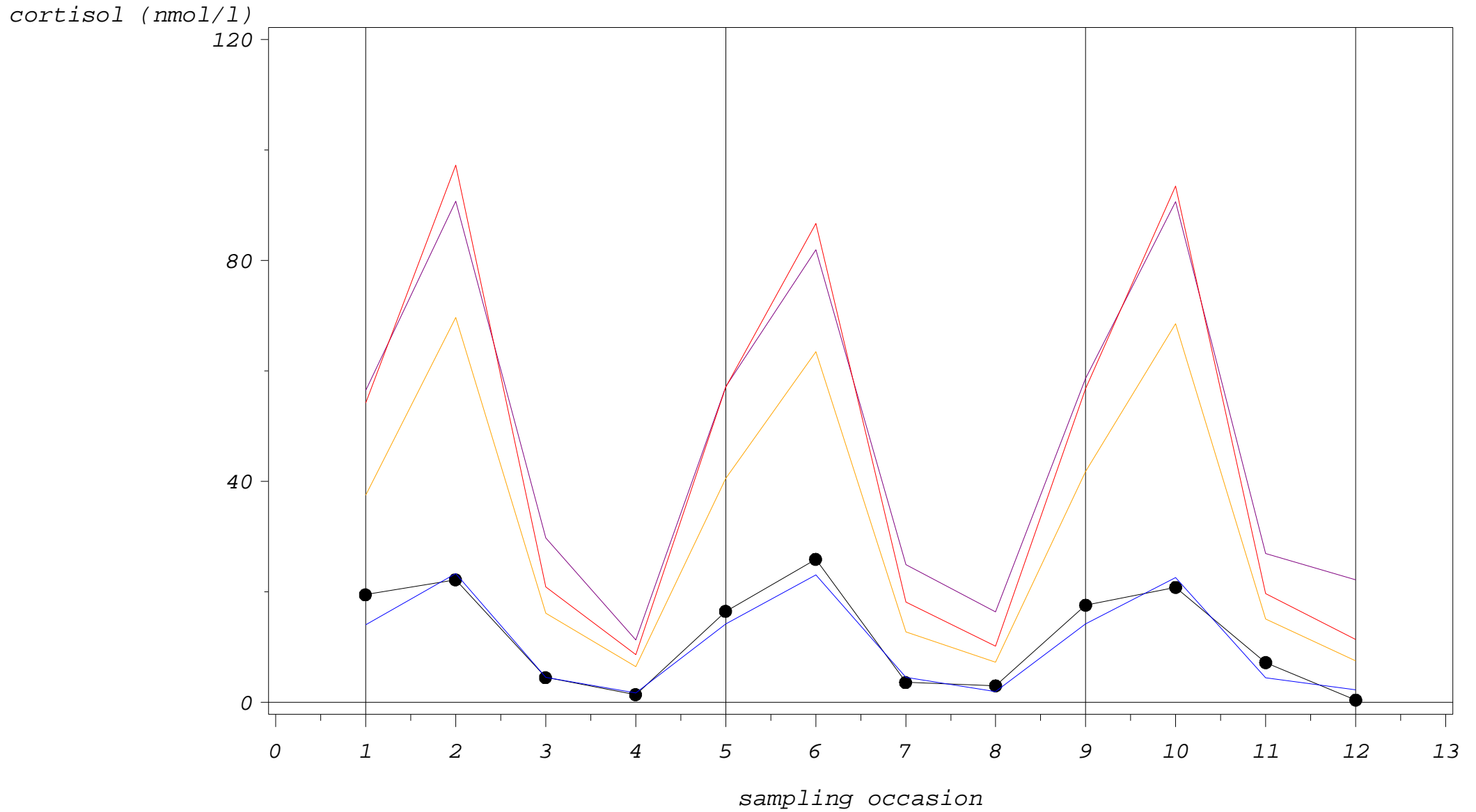


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02519

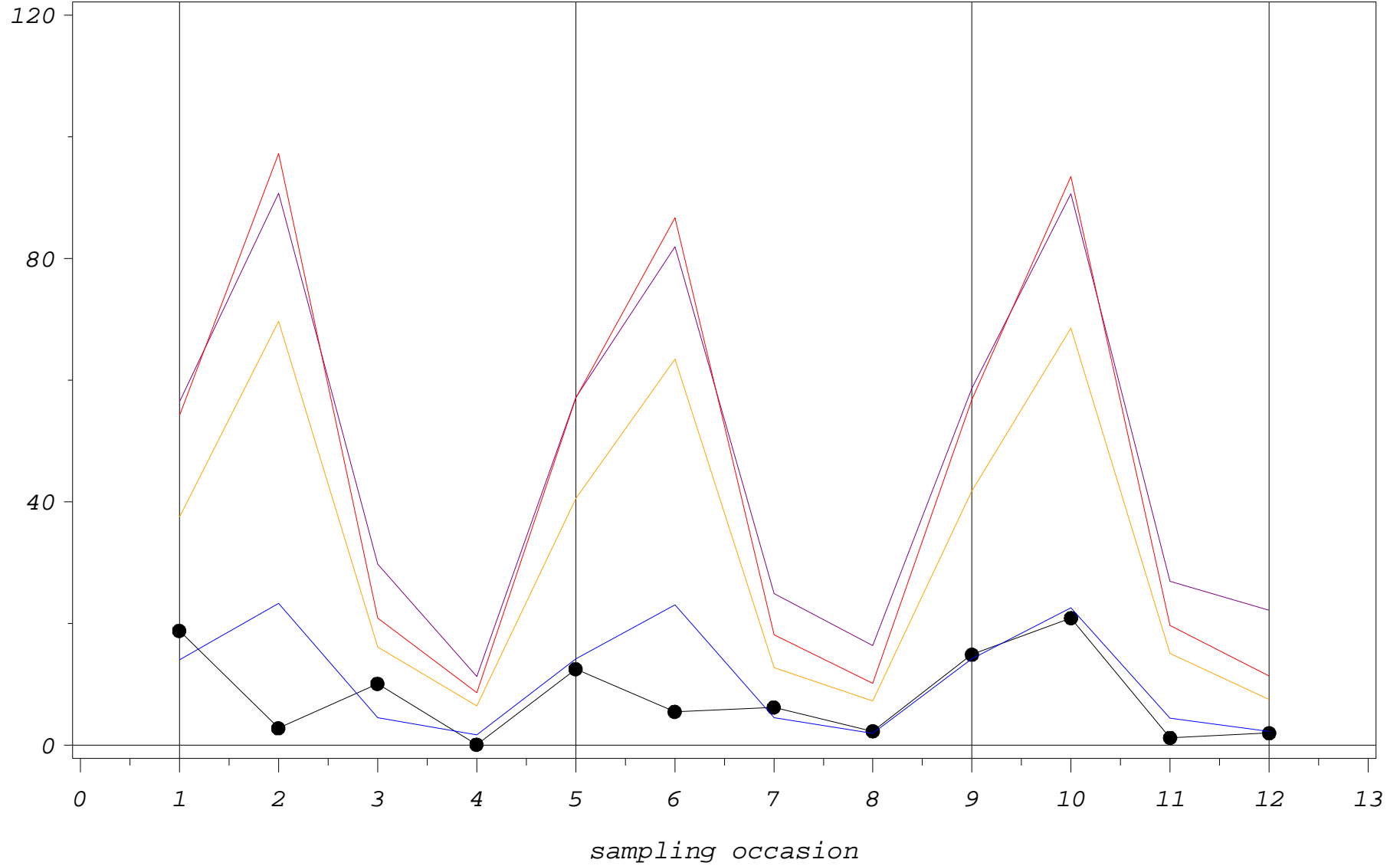


PLOT	●—●—● Cortisol	— Median	— MW+(4*SD)
	— Q3+(3*IQR)	— Q2+(4*(Q3-Q2))	●●● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02522

cortisol (nmol/l)

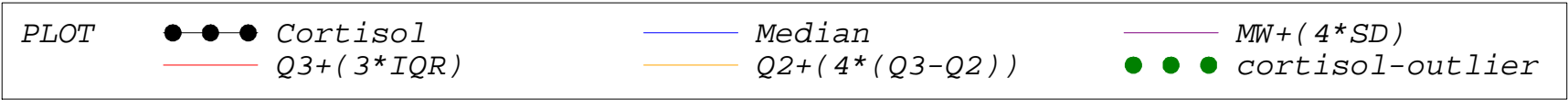
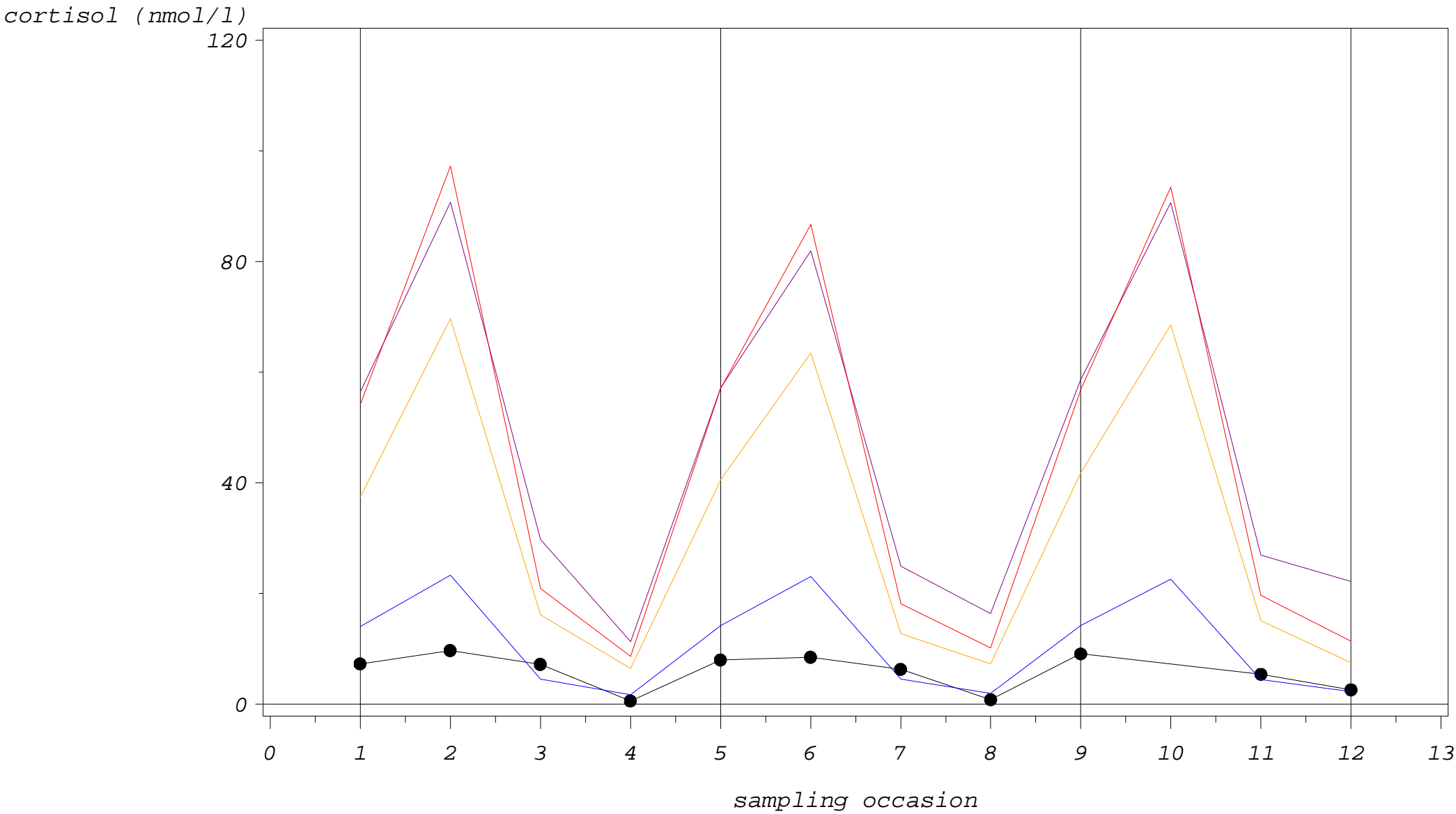


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

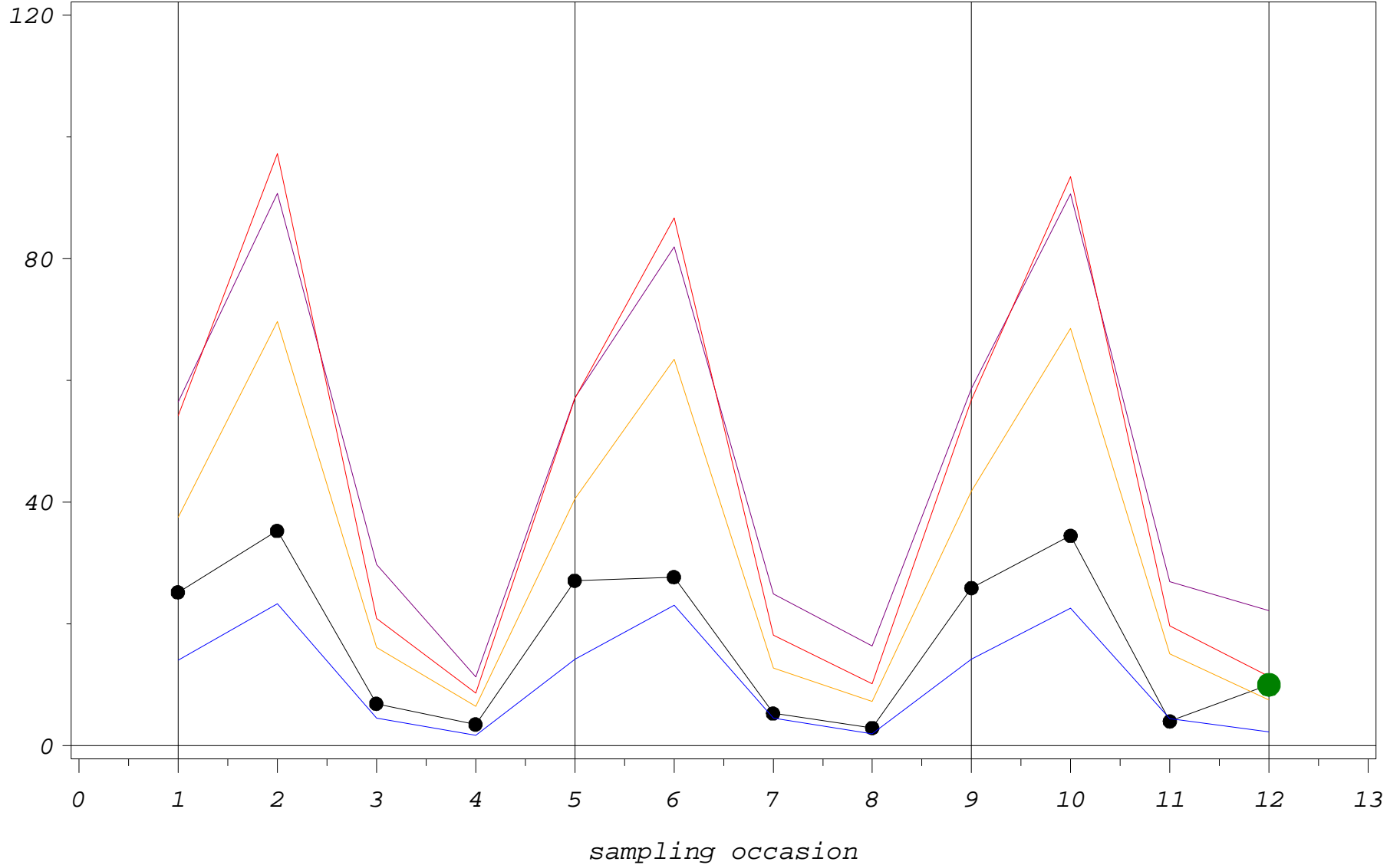
CODE=H02523



Study 2: cortisol single profiles with outlier fences

CODE=H02524

cortisol (nmol/l)

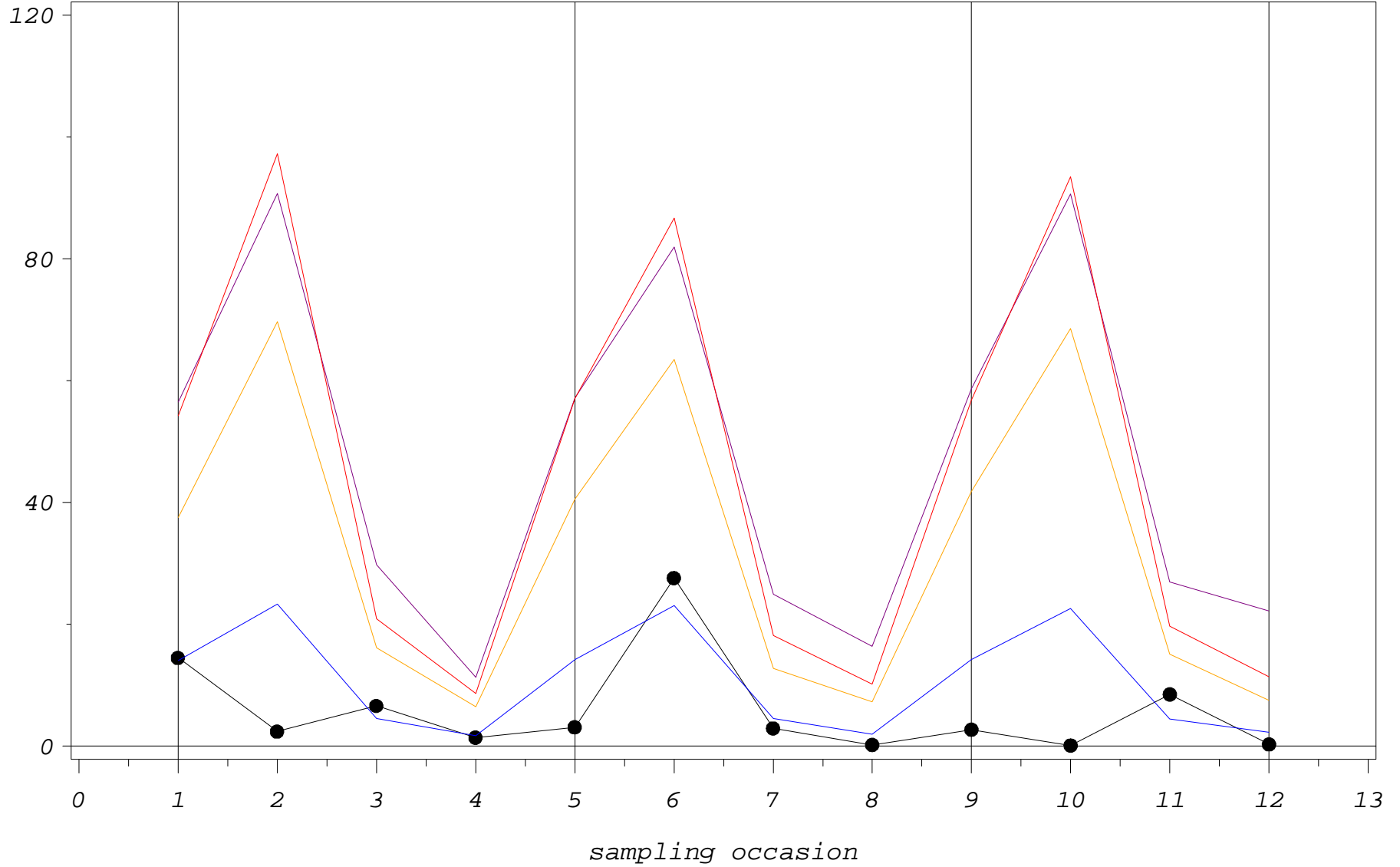


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02525

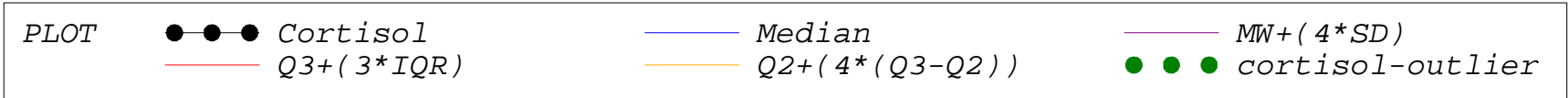
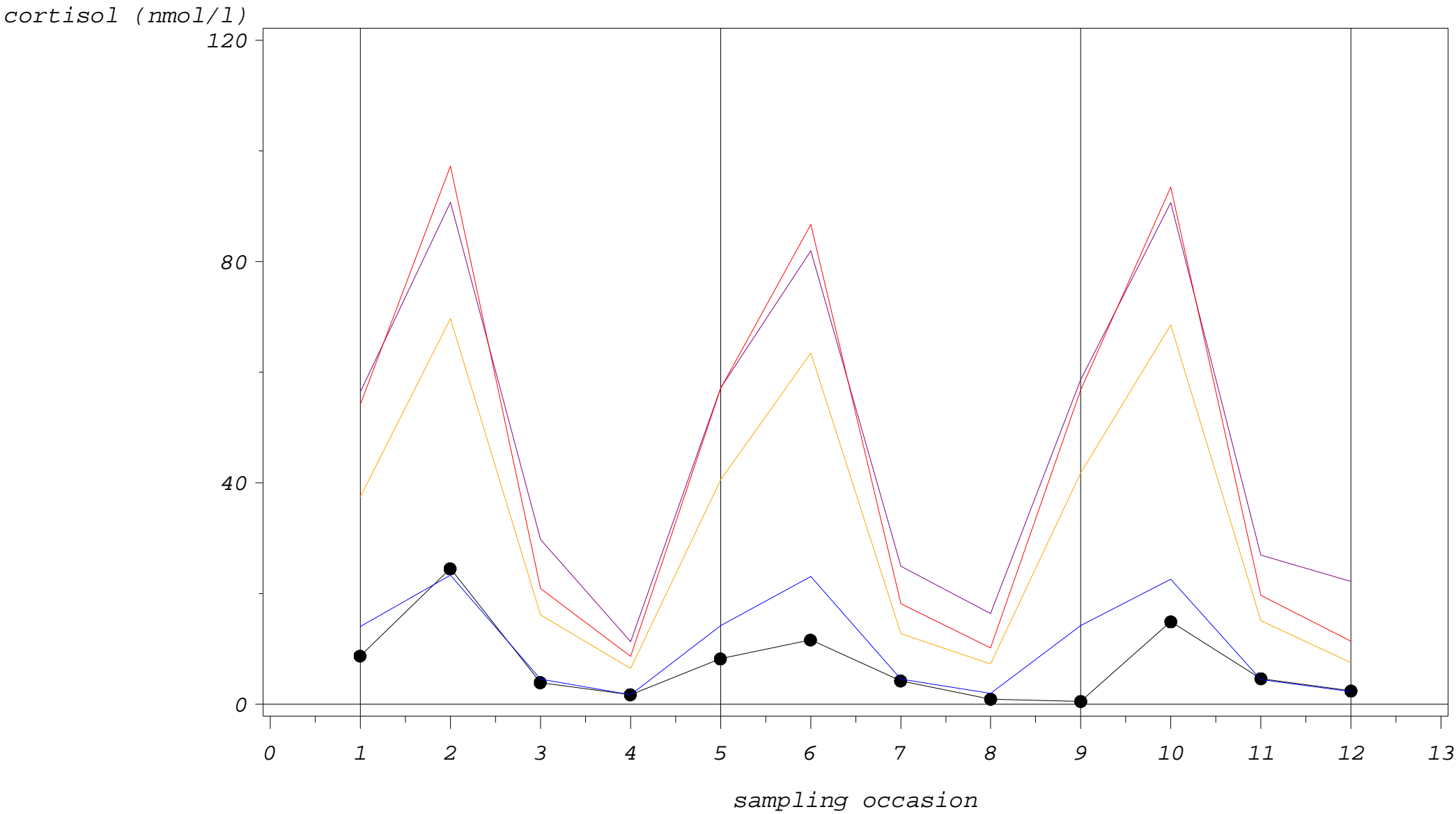
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

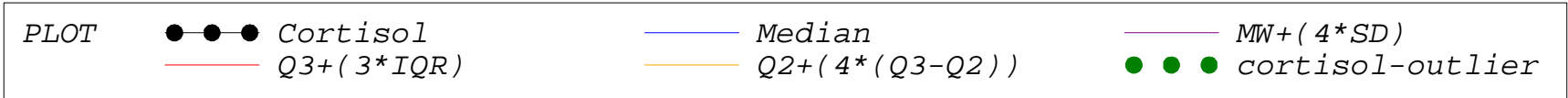
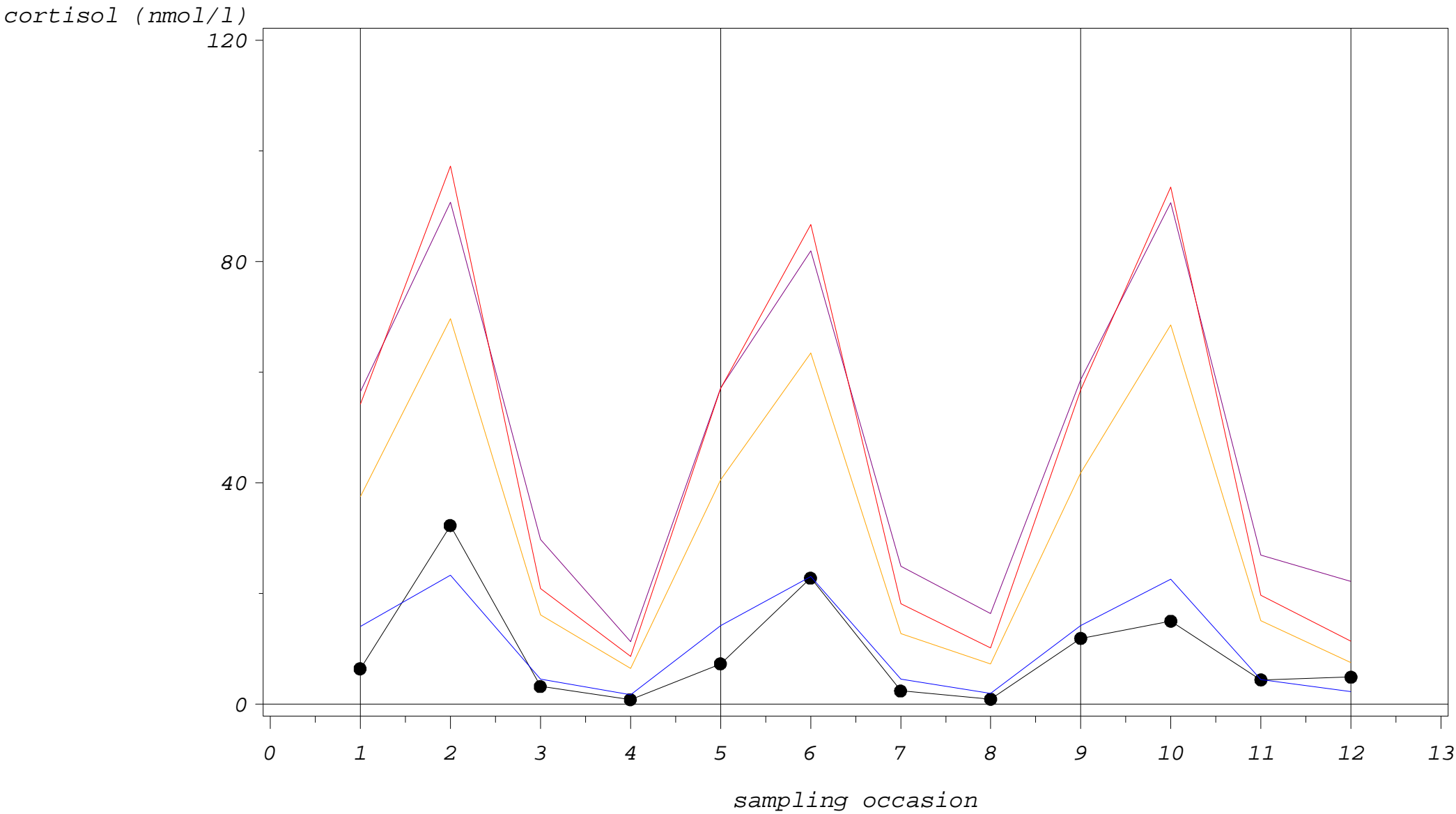
Study 2: cortisol single profiles with outlier fences

CODE=H02526



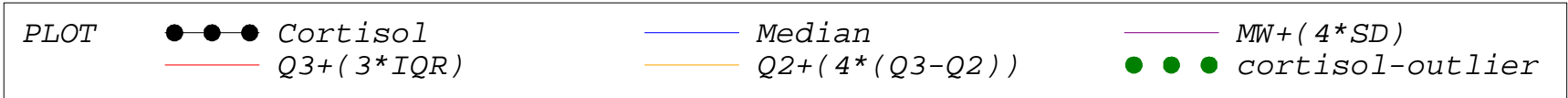
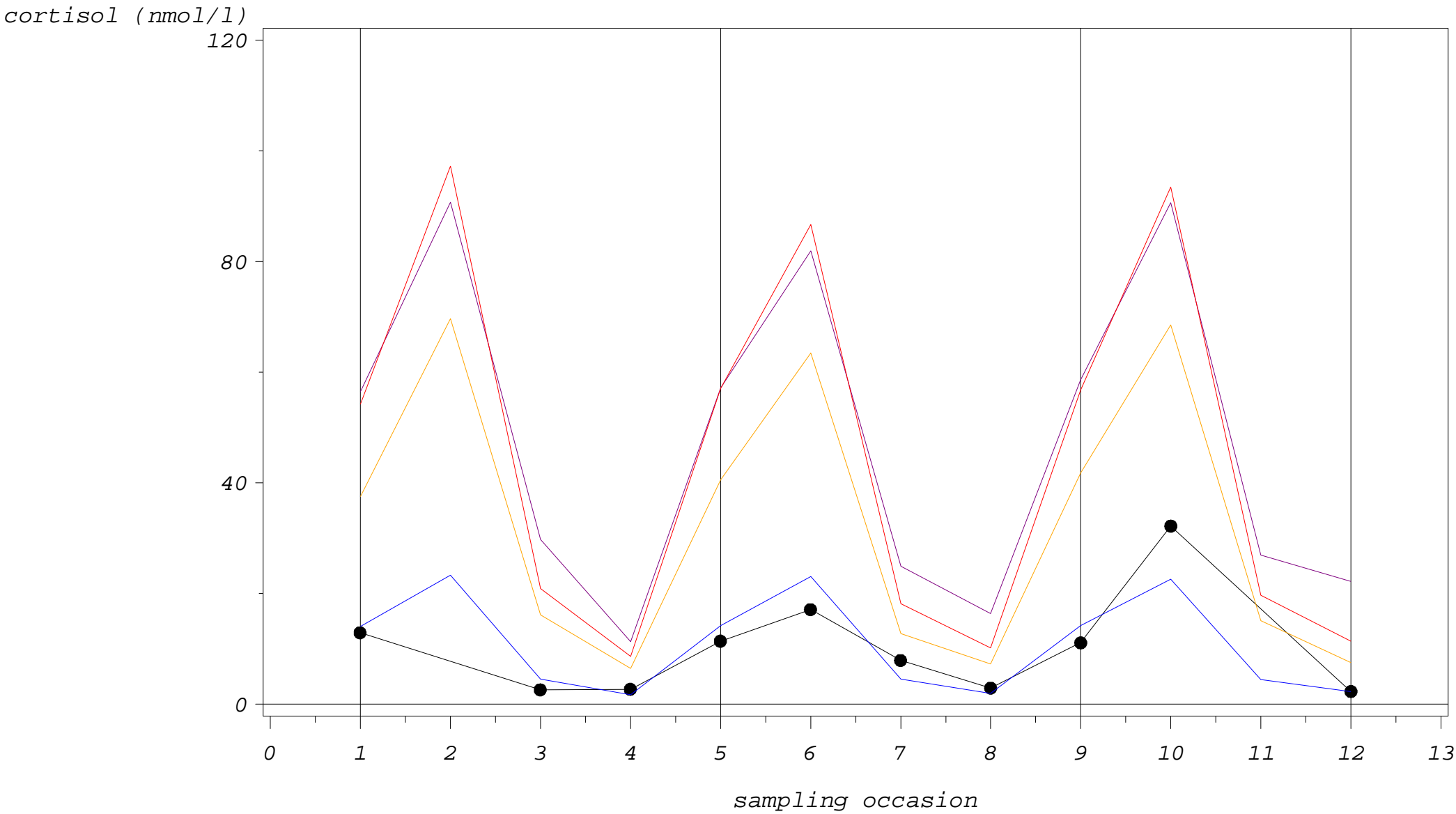
Study 2: cortisol single profiles with outlier fences

CODE=H02527



Study 2: cortisol single profiles with outlier fences

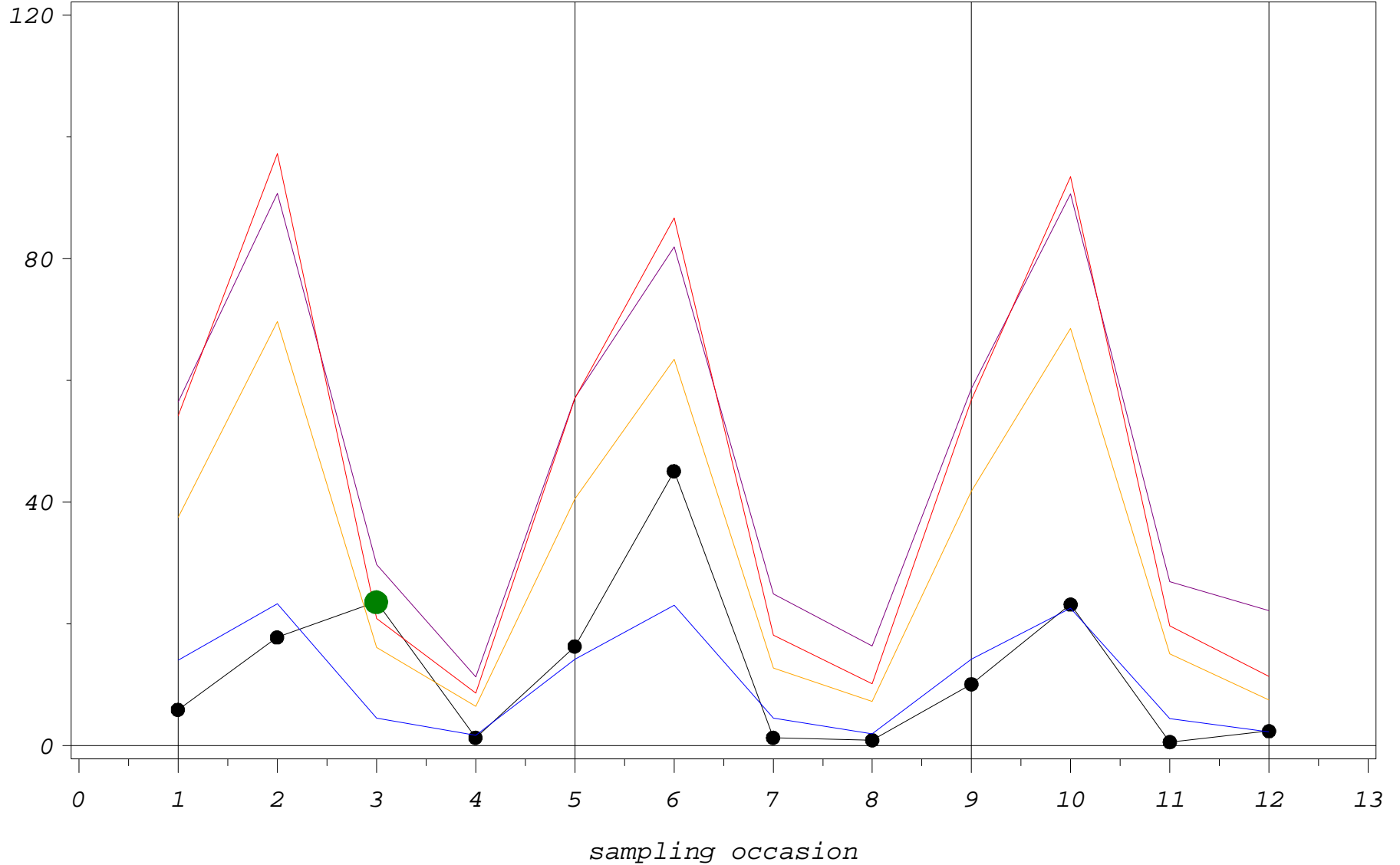
CODE=H02601



Study 2: cortisol single profiles with outlier fences

CODE=H02602

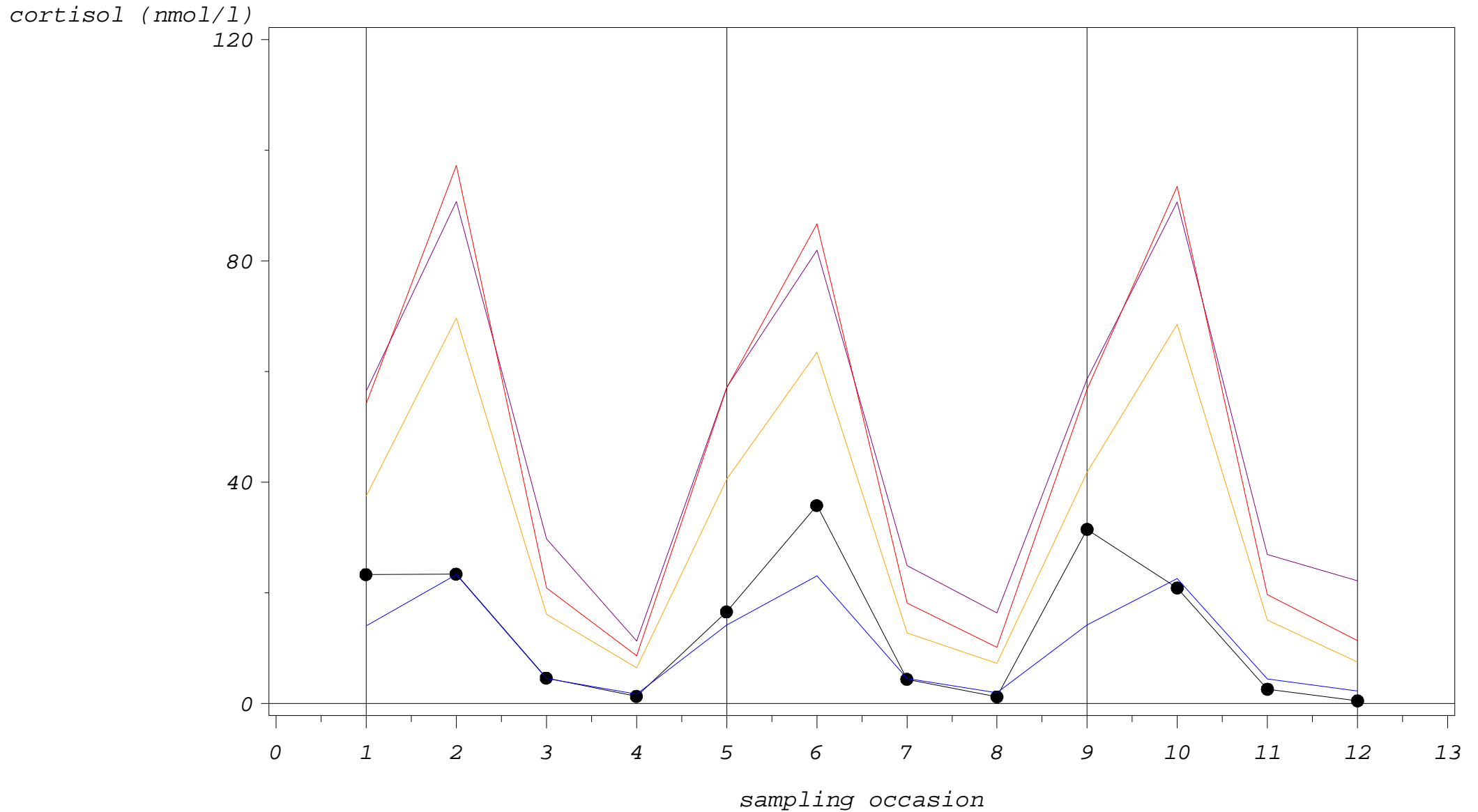
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 \cdot SD)$
 — $Q3 + (3 \cdot IQR)$ — $Q2 + (4 \cdot (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

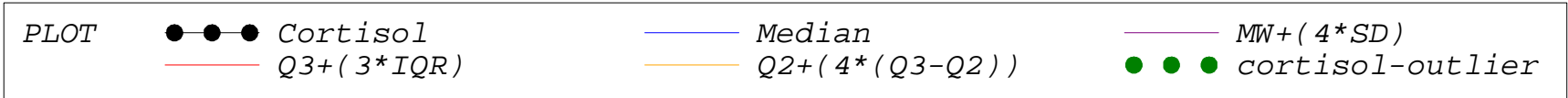
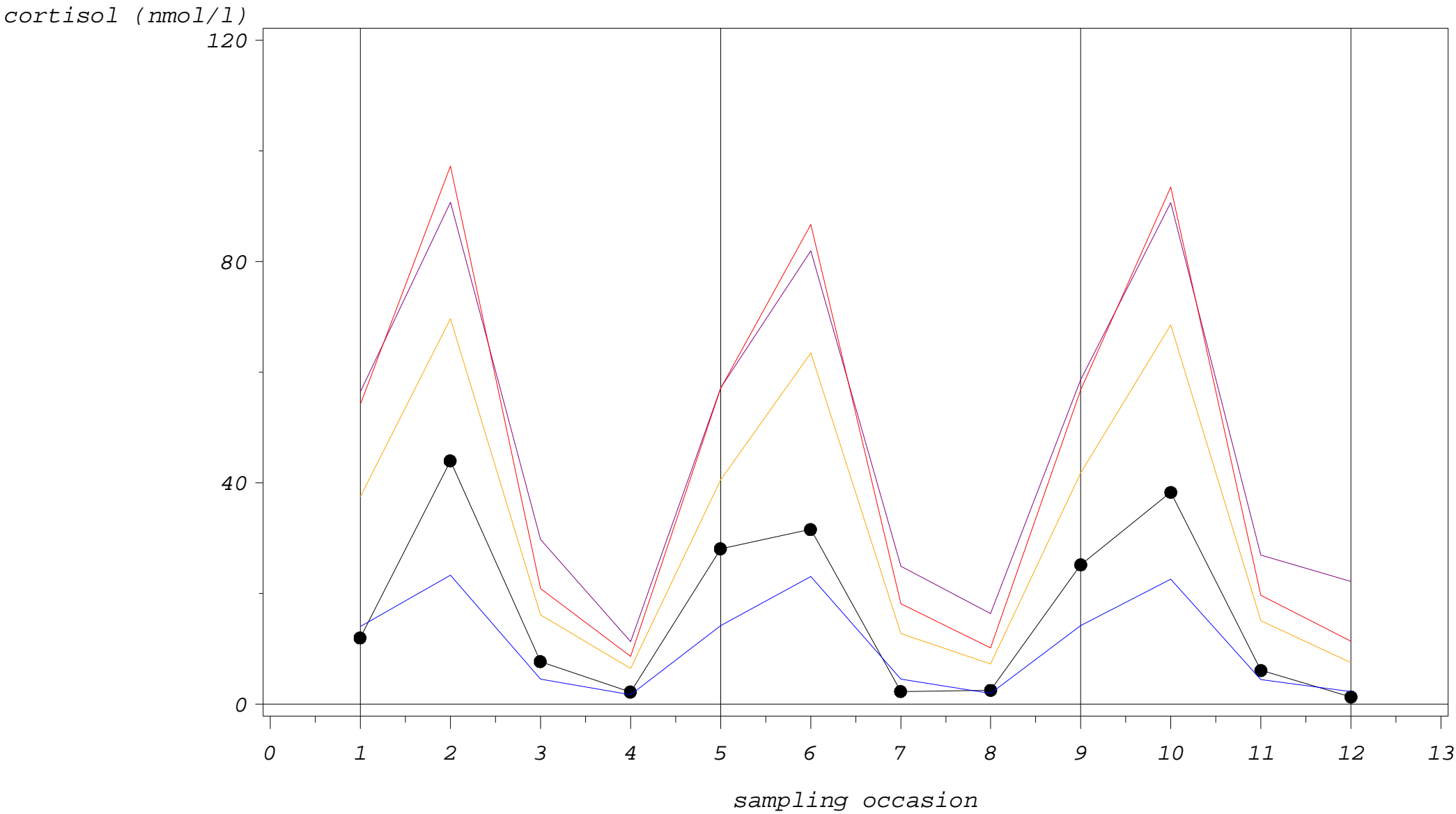
CODE=H02603



PLOT	●—●—●	Cortisol	—	Median	—	MW+(4*SD)
	—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

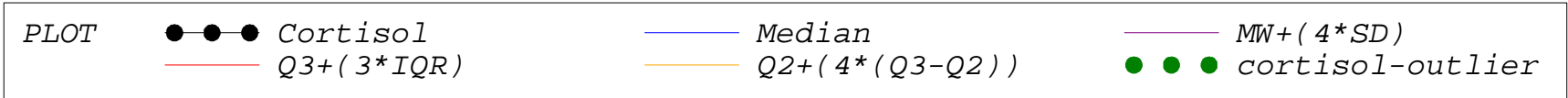
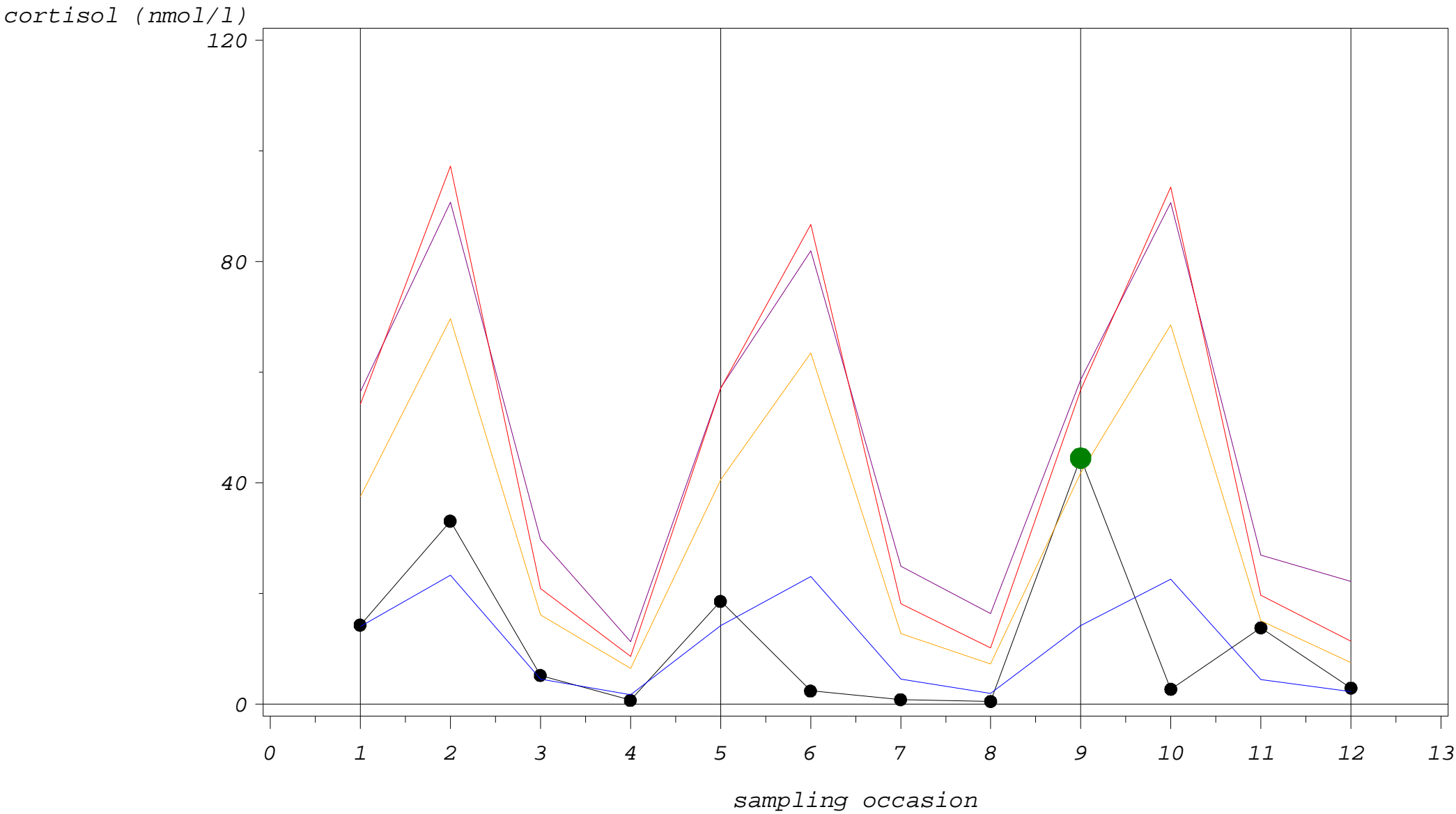
Study 2: cortisol single profiles with outlier fences

CODE=H02604



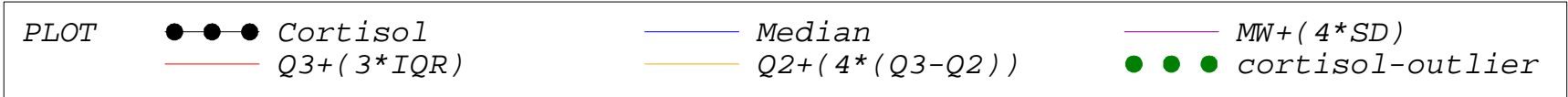
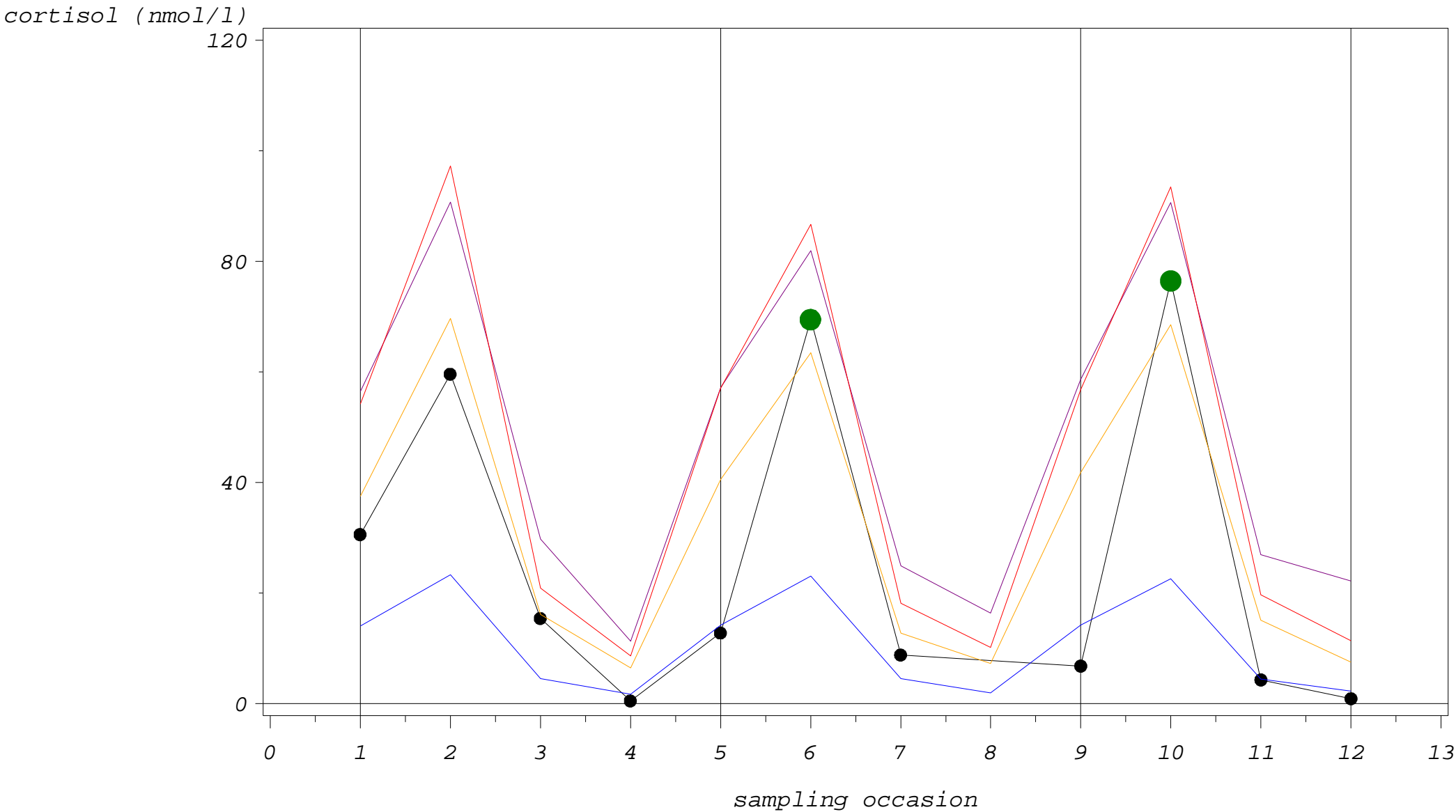
Study 2: cortisol single profiles with outlier fences

CODE=H02605



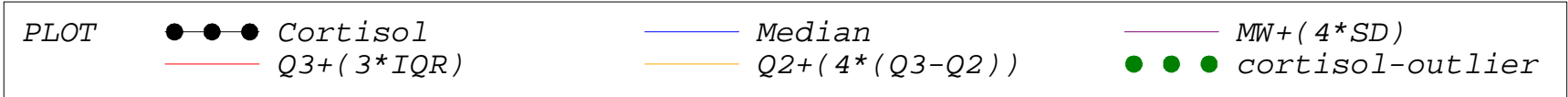
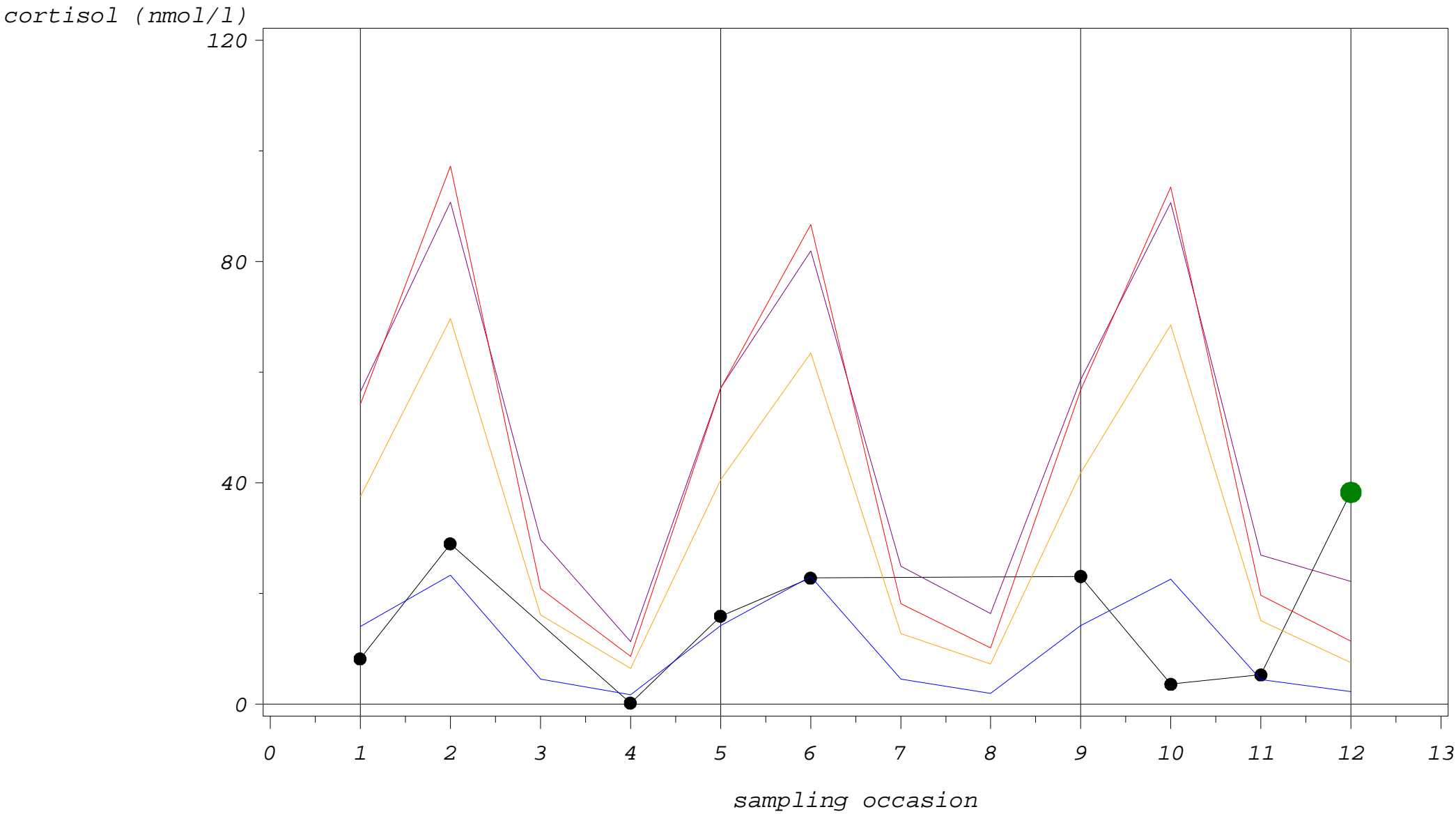
Study 2: cortisol single profiles with outlier fences

CODE=H02606



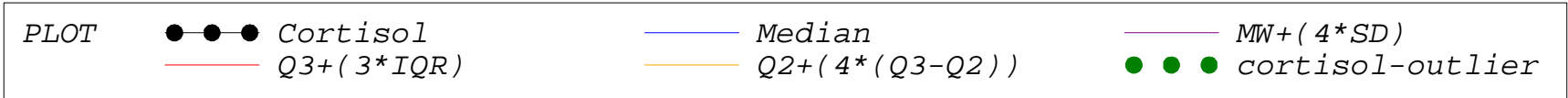
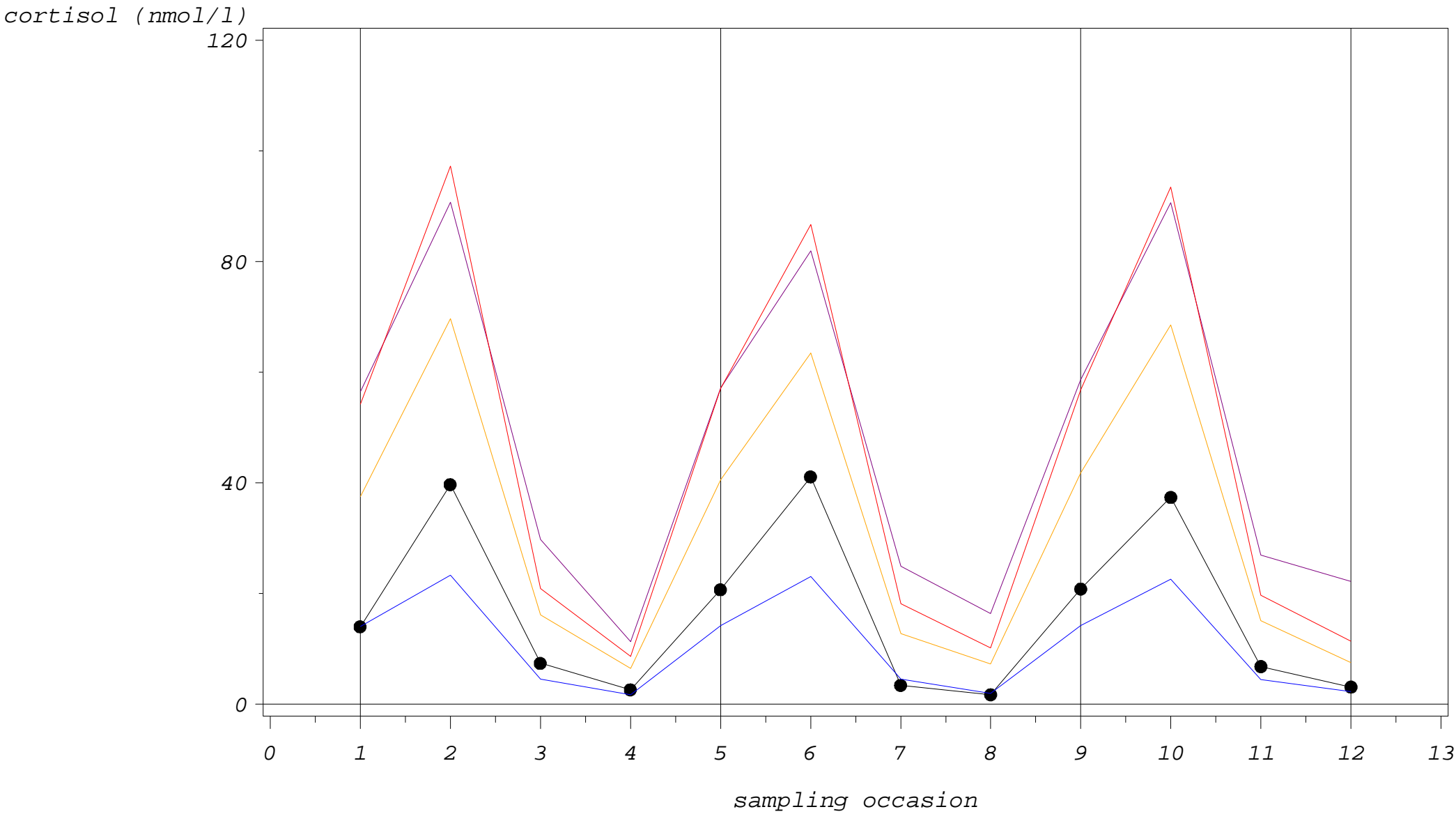
Study 2: cortisol single profiles with outlier fences

CODE=H02607



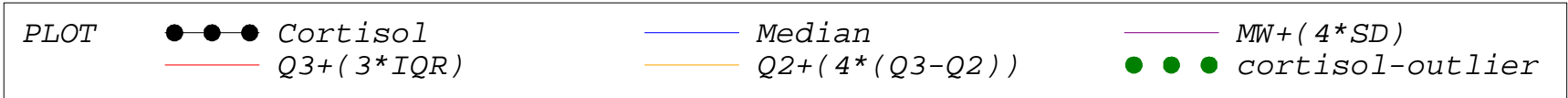
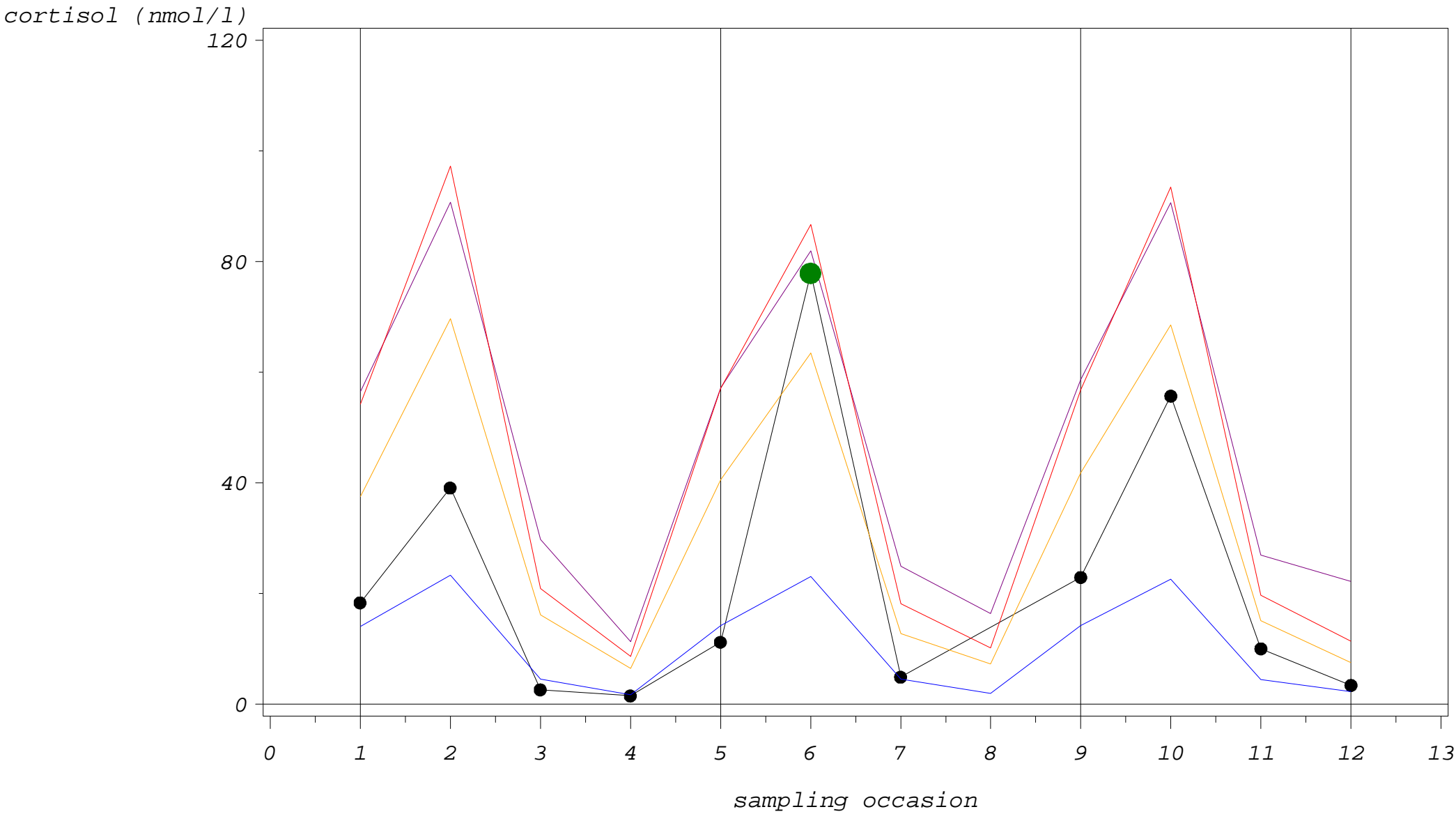
Study 2: cortisol single profiles with outlier fences

CODE=H02608



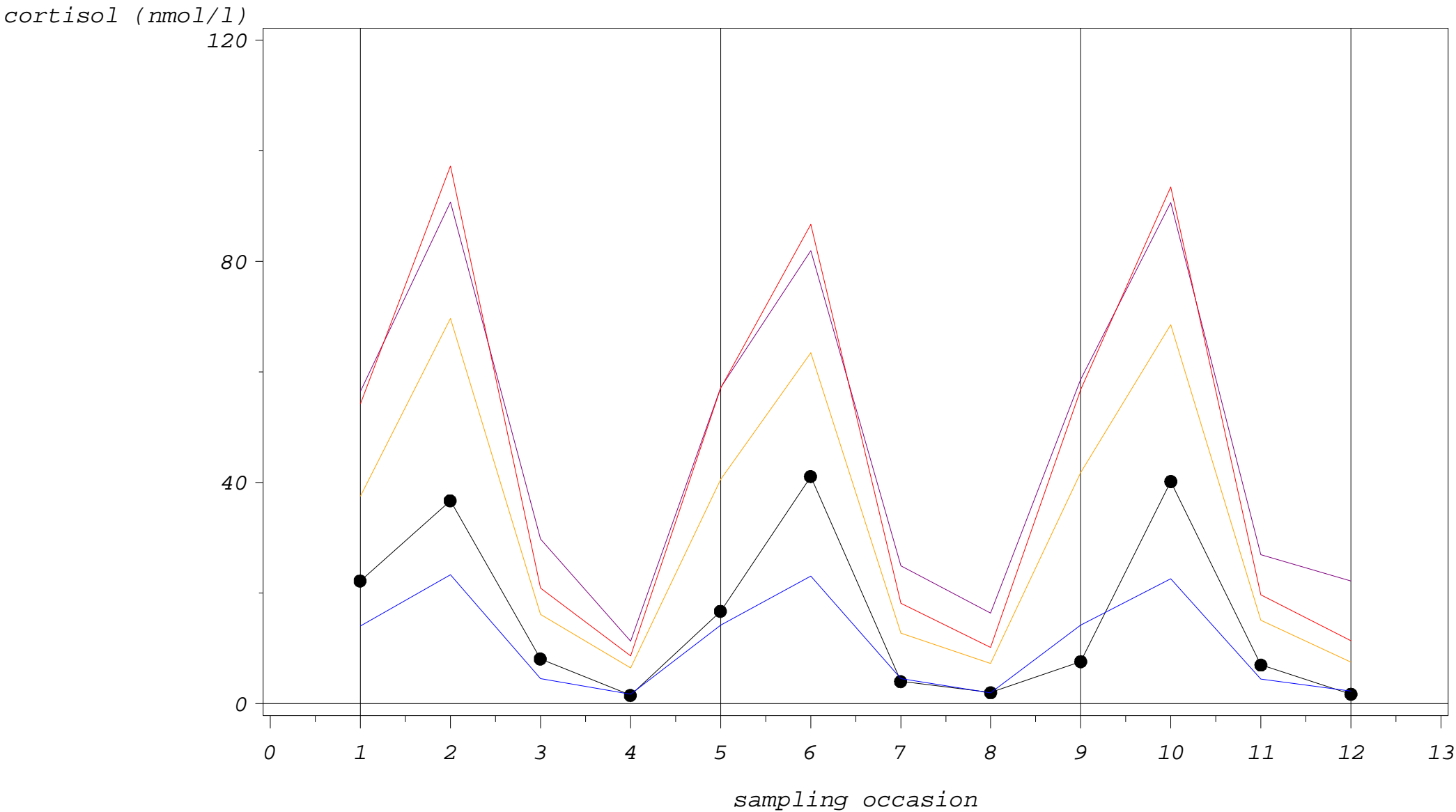
Study 2: cortisol single profiles with outlier fences

CODE=H02609



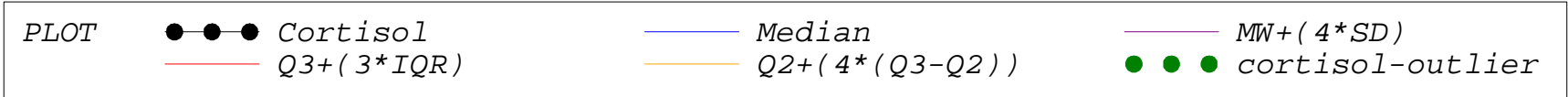
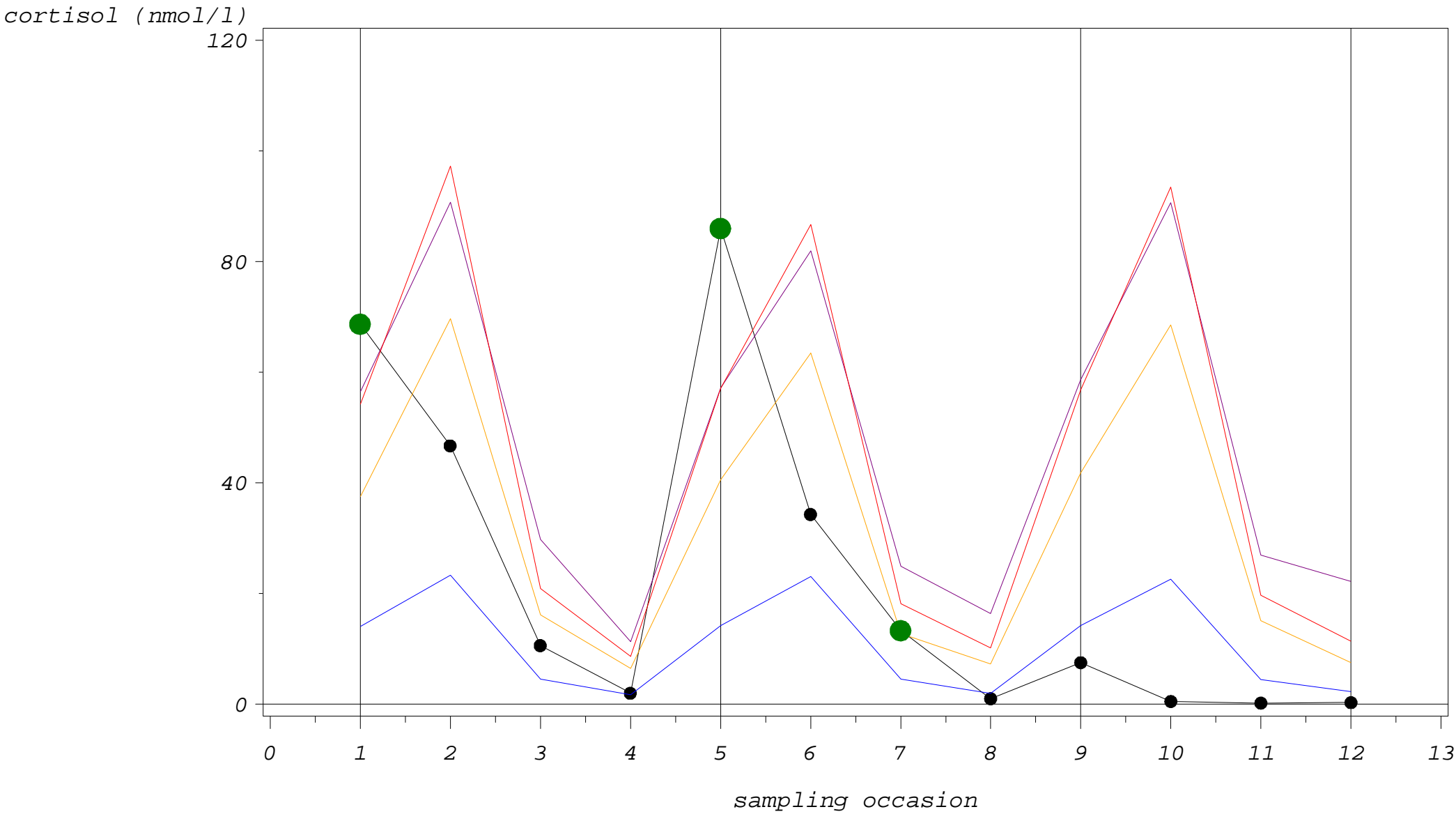
Study 2: cortisol single profiles with outlier fences

CODE=H02610



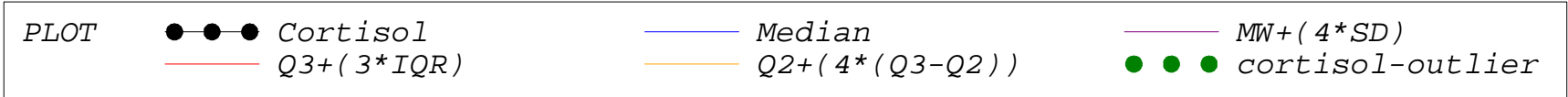
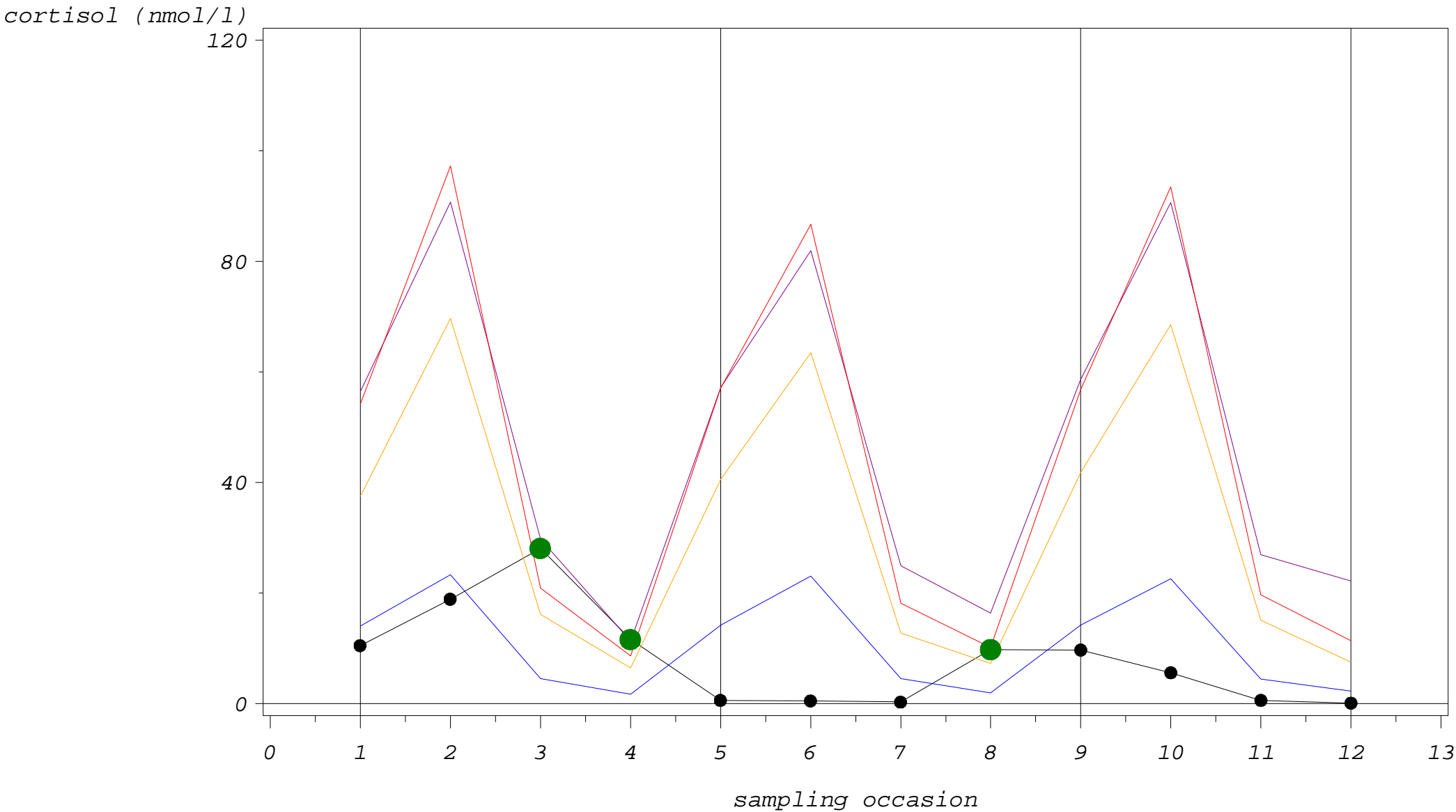
Study 2: cortisol single profiles with outlier fences

CODE=H02611



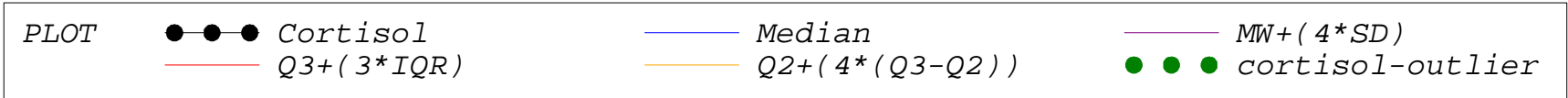
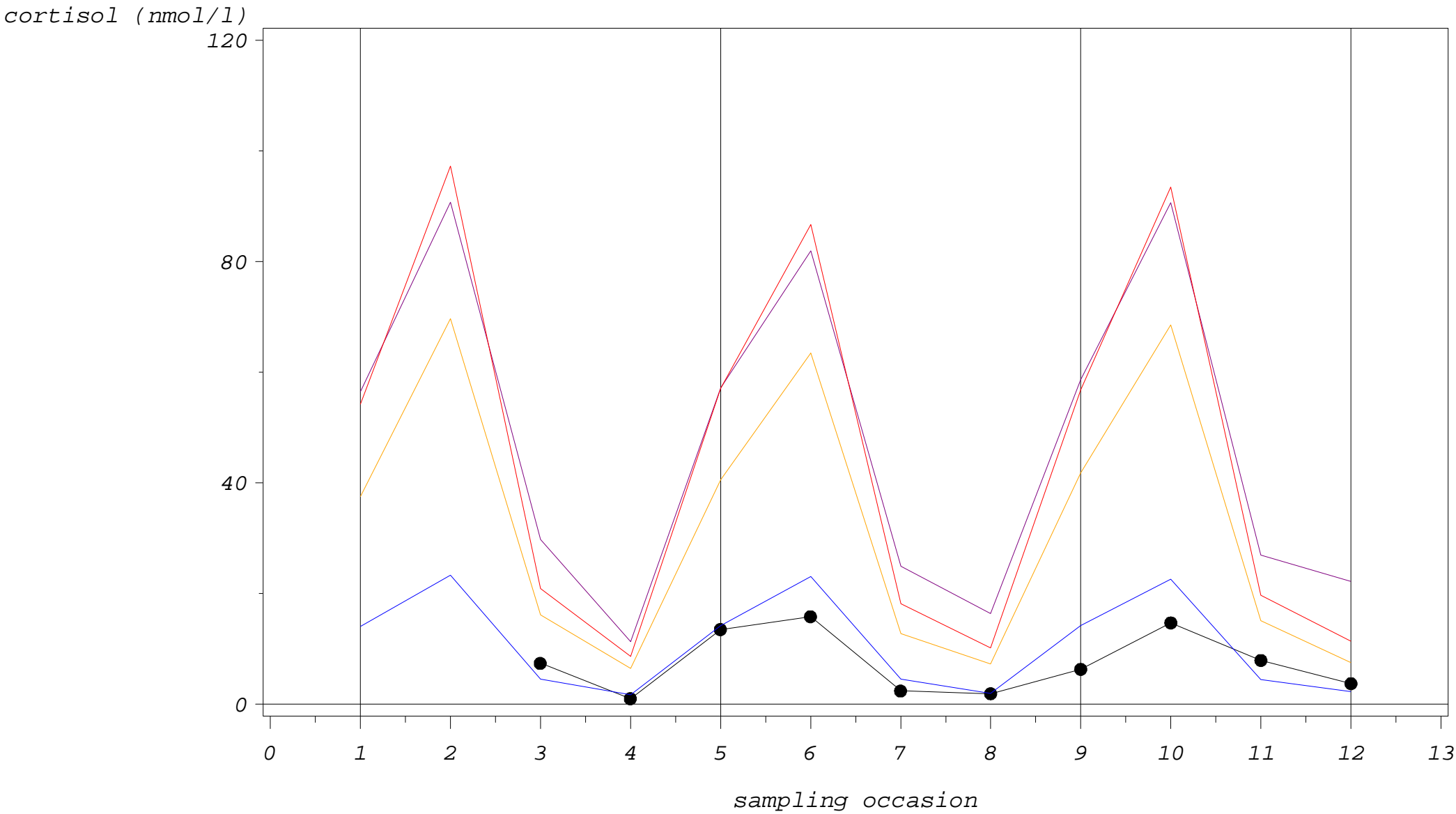
Study 2: cortisol single profiles with outlier fences

CODE=H02612



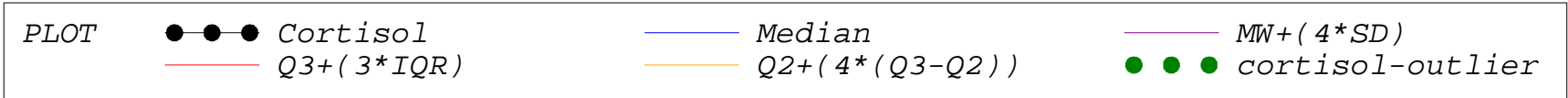
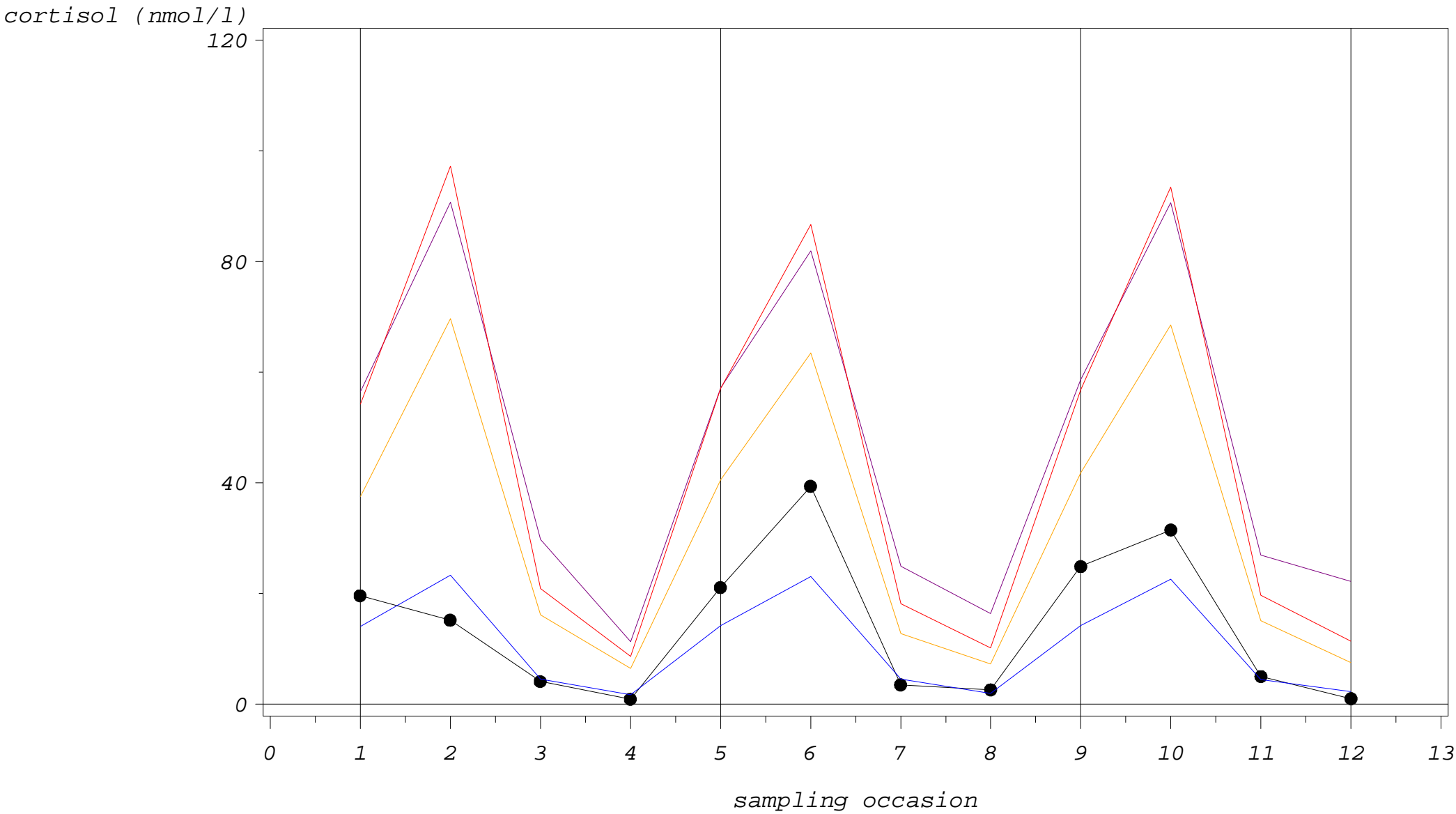
Study 2: cortisol single profiles with outlier fences

CODE=H02613



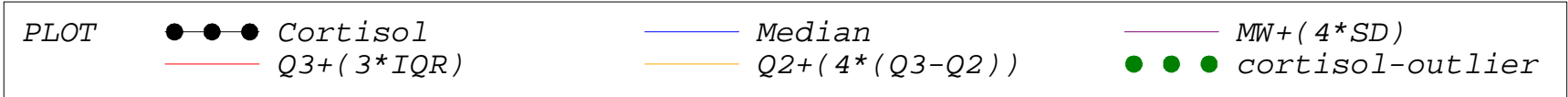
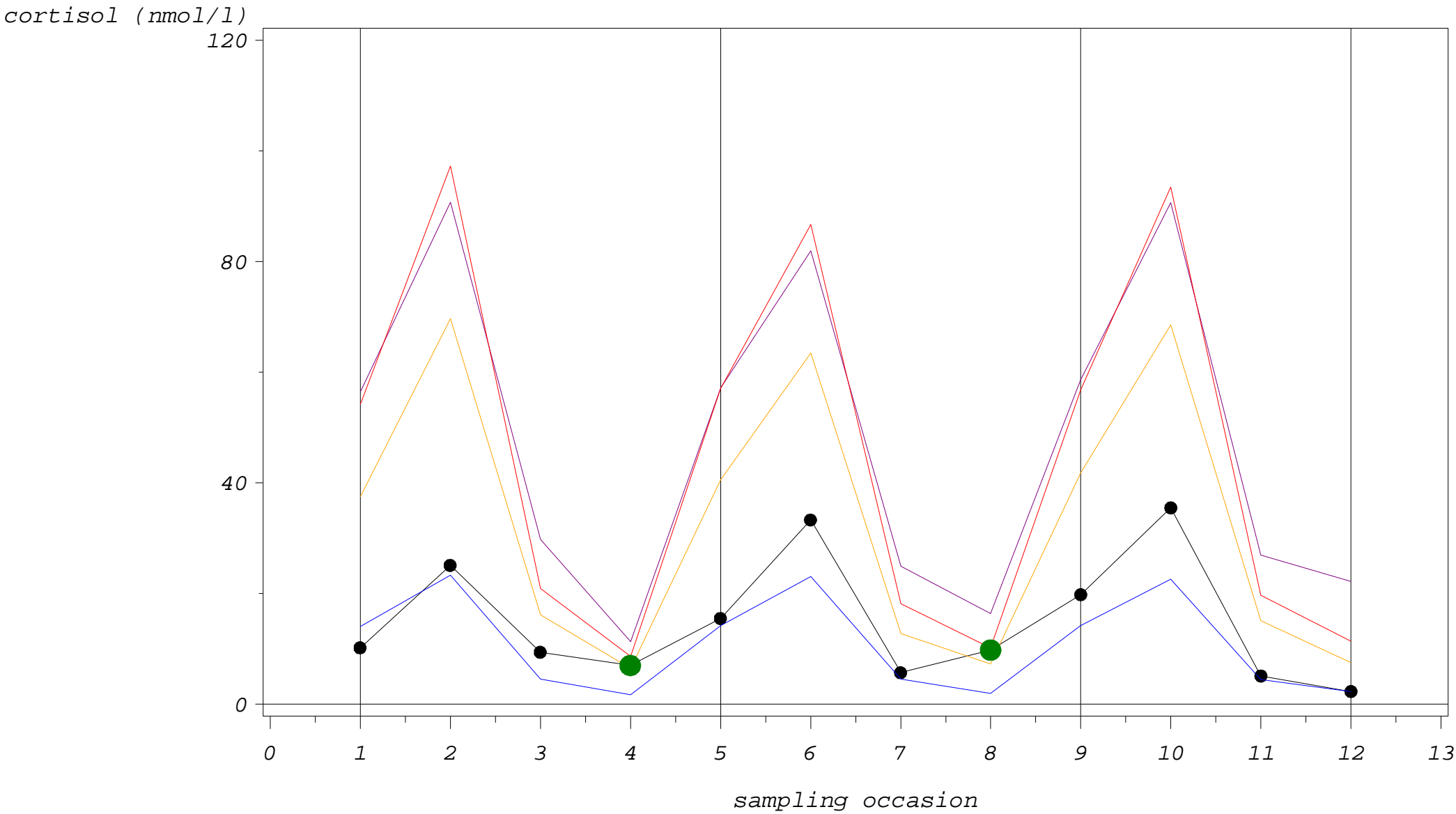
Study 2: cortisol single profiles with outlier fences

CODE=H02614



Study 2: cortisol single profiles with outlier fences

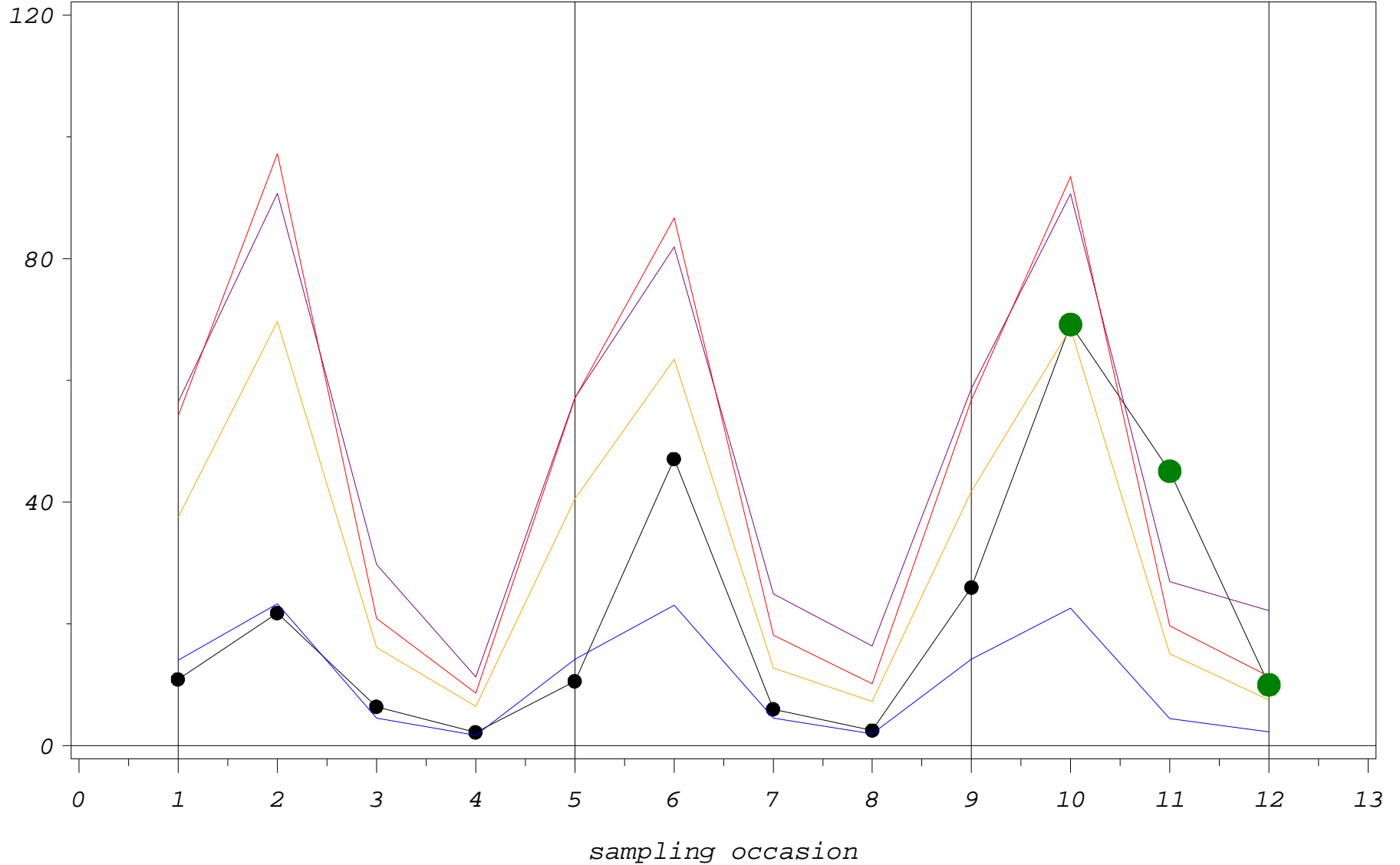
CODE=H02615



Study 2: cortisol single profiles with outlier fences

CODE=H02616

cortisol (nmol/l)



PLOT

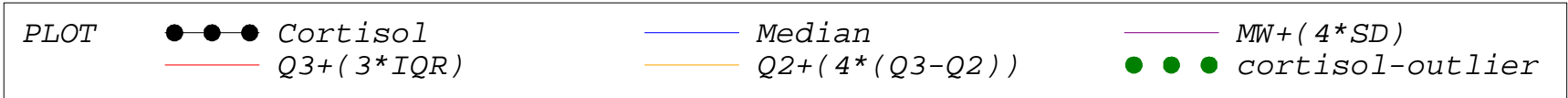
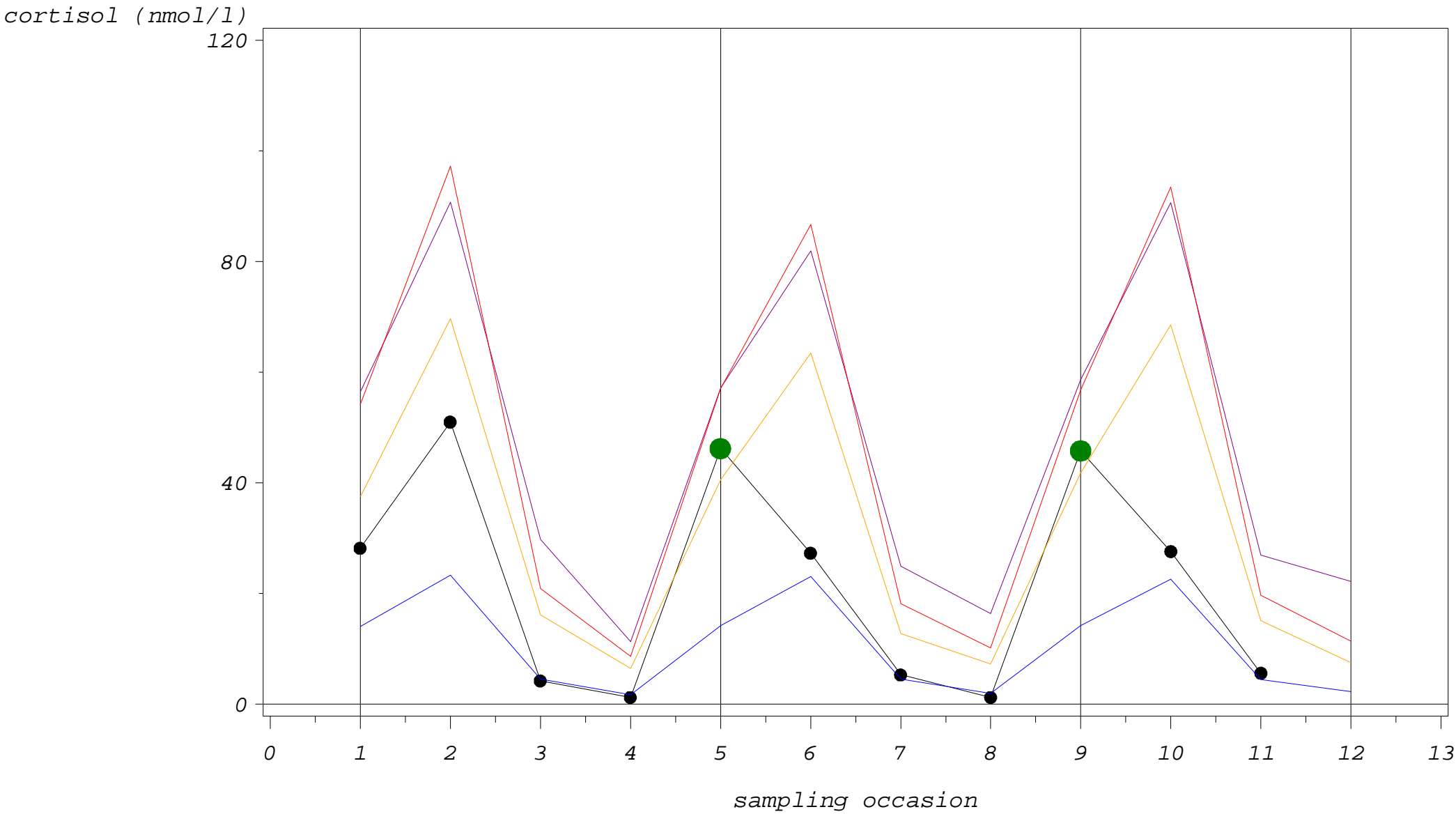
●—●—● Cortisol
— Q3+(3*IQR)

— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
● ● ● cortisol-outlier

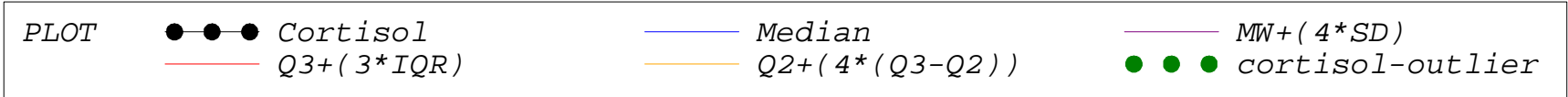
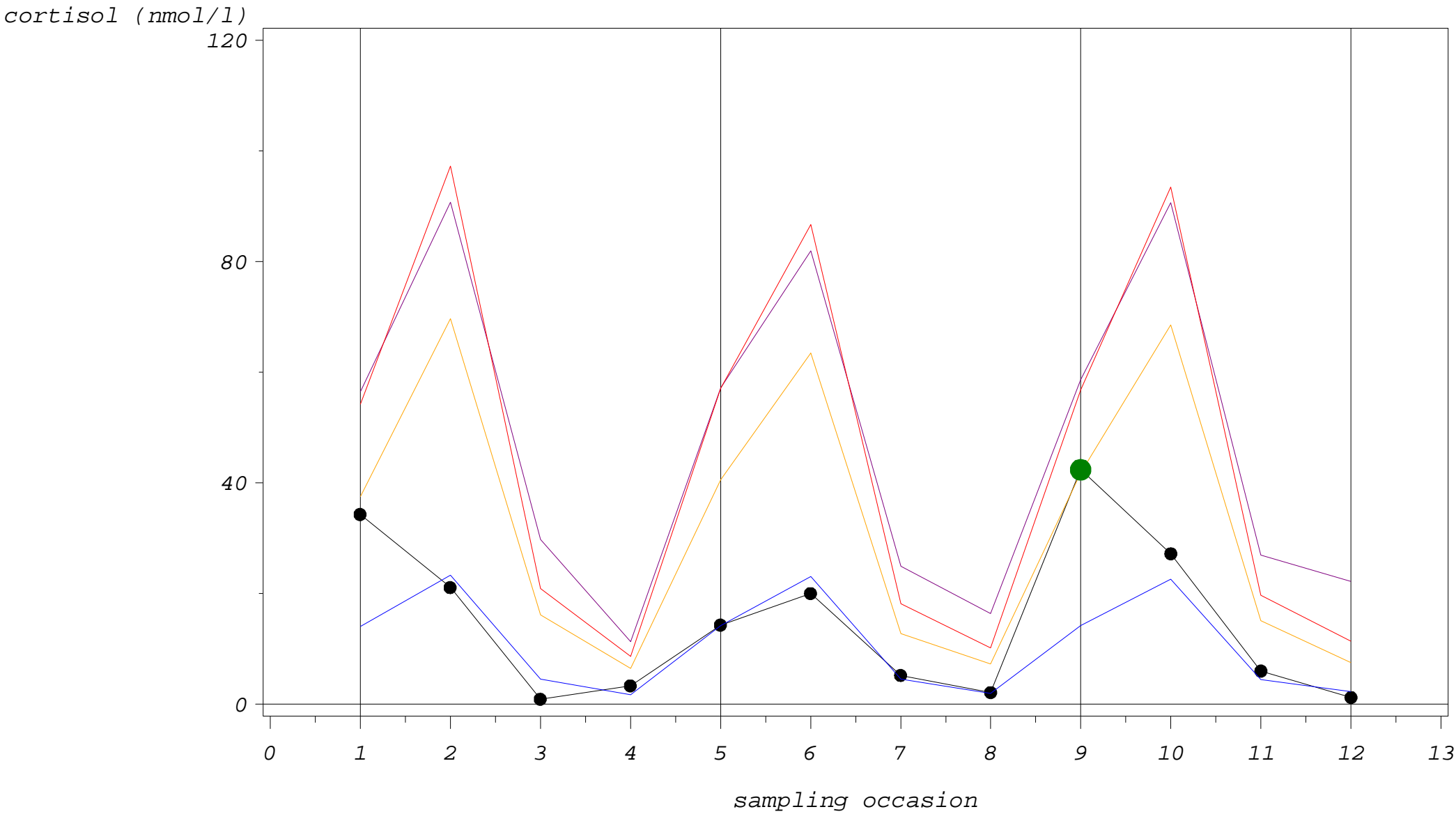
Study 2: cortisol single profiles with outlier fences

CODE=H02617



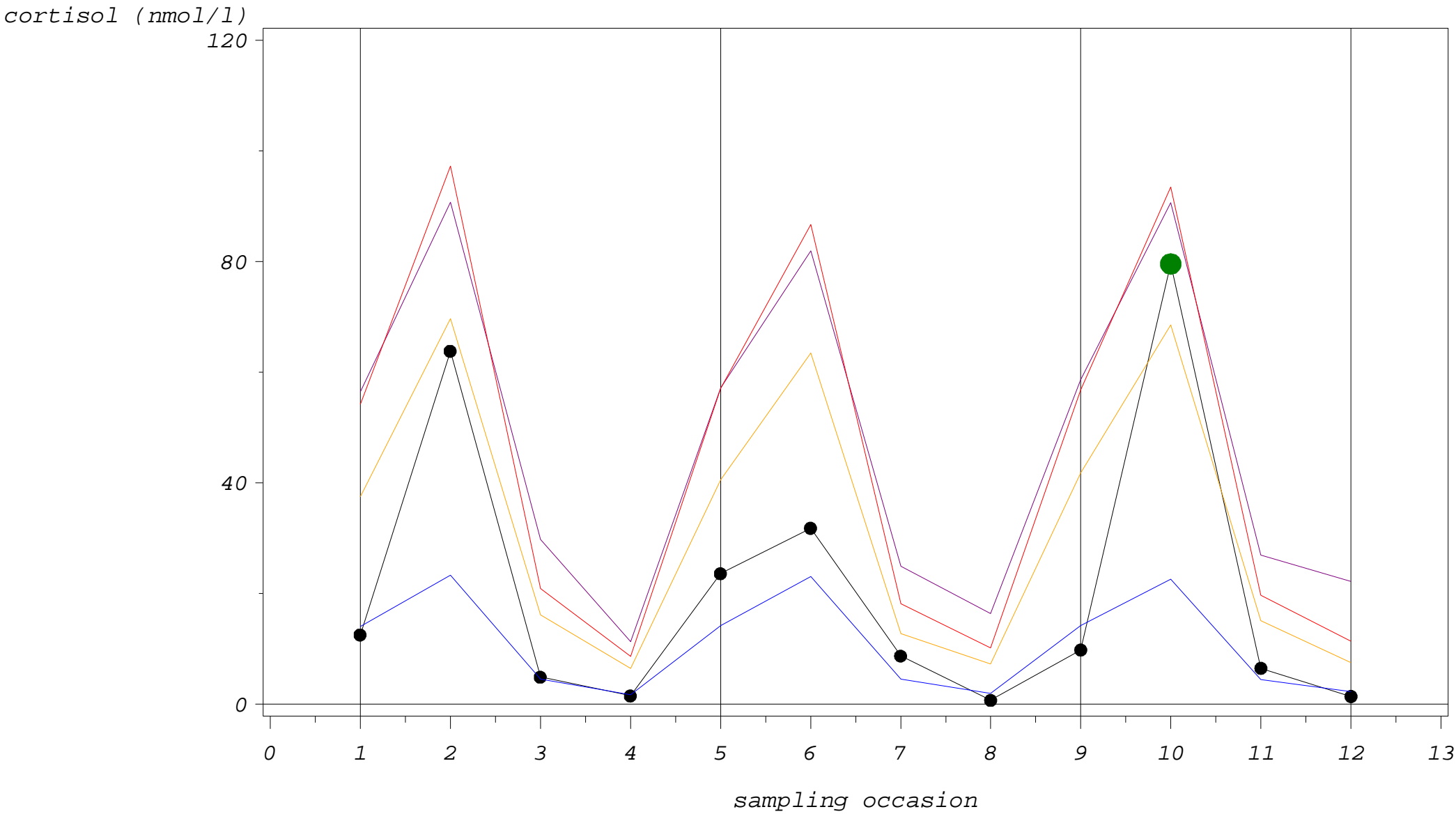
Study 2: cortisol single profiles with outlier fences

CODE=H02618



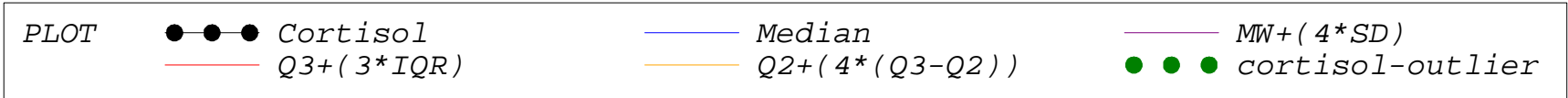
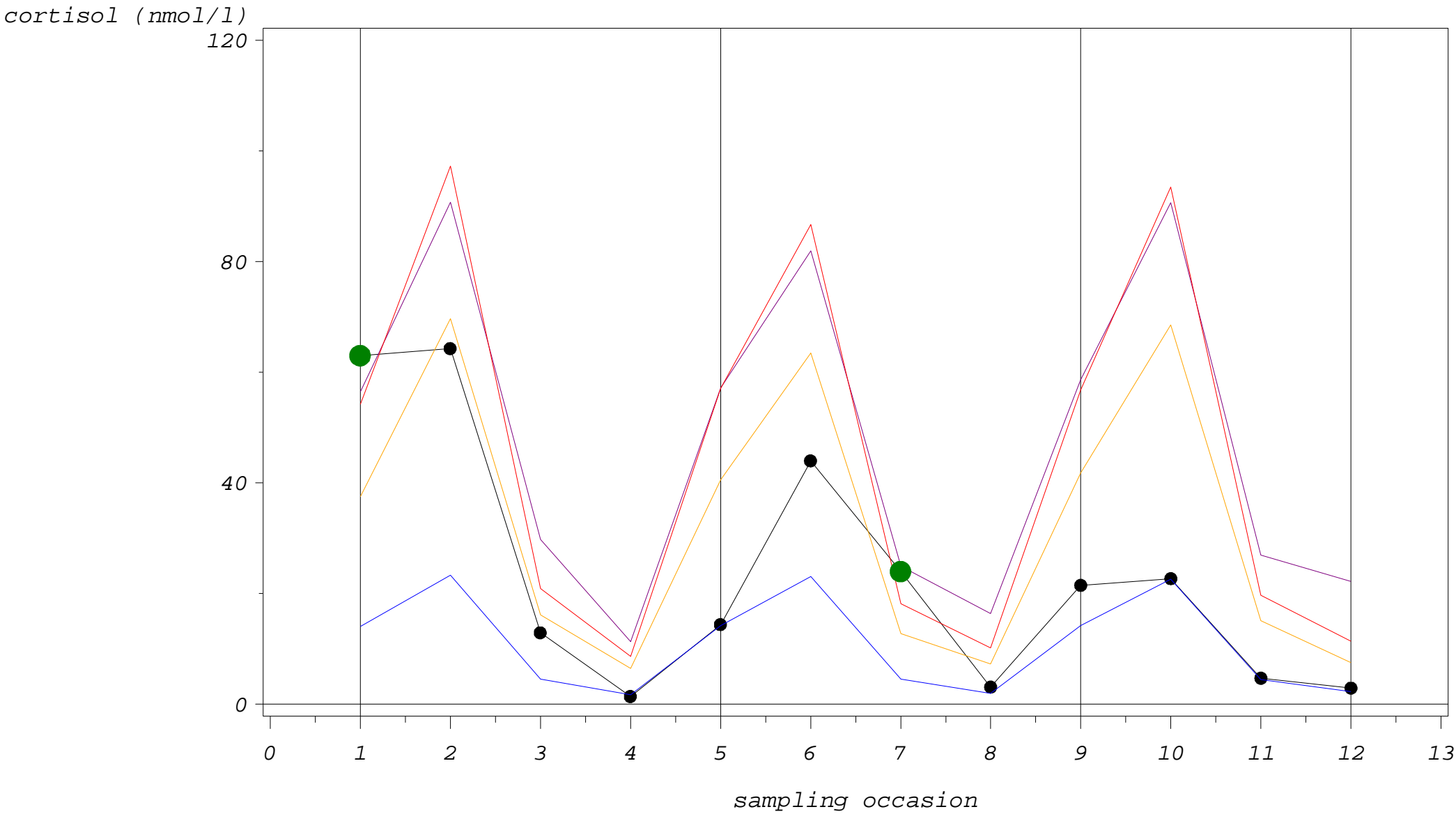
Study 2: cortisol single profiles with outlier fences

CODE=H02619



Study 2: cortisol single profiles with outlier fences

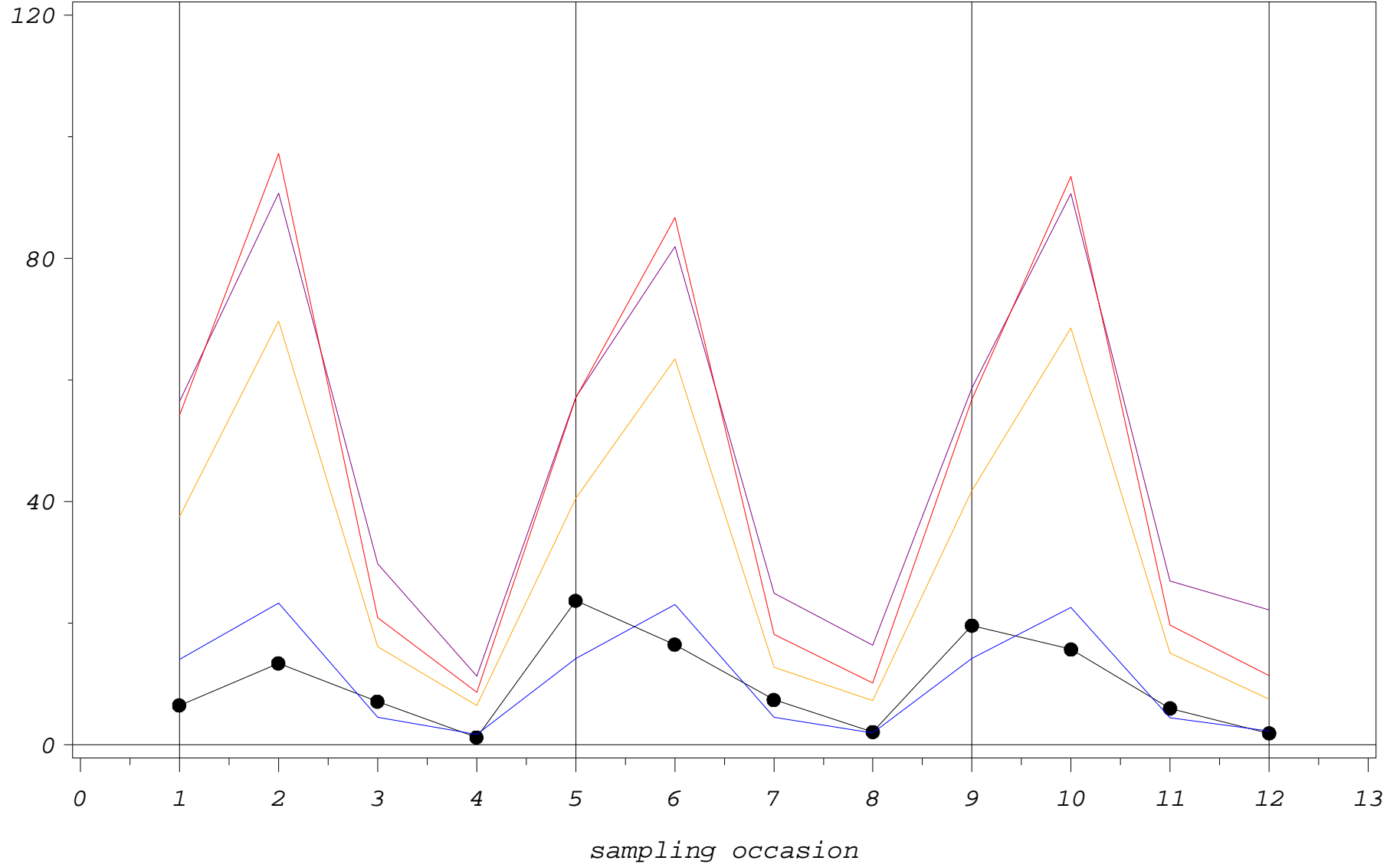
CODE=H02620



Study 2: cortisol single profiles with outlier fences

CODE=H02621

cortisol (nmol/l)

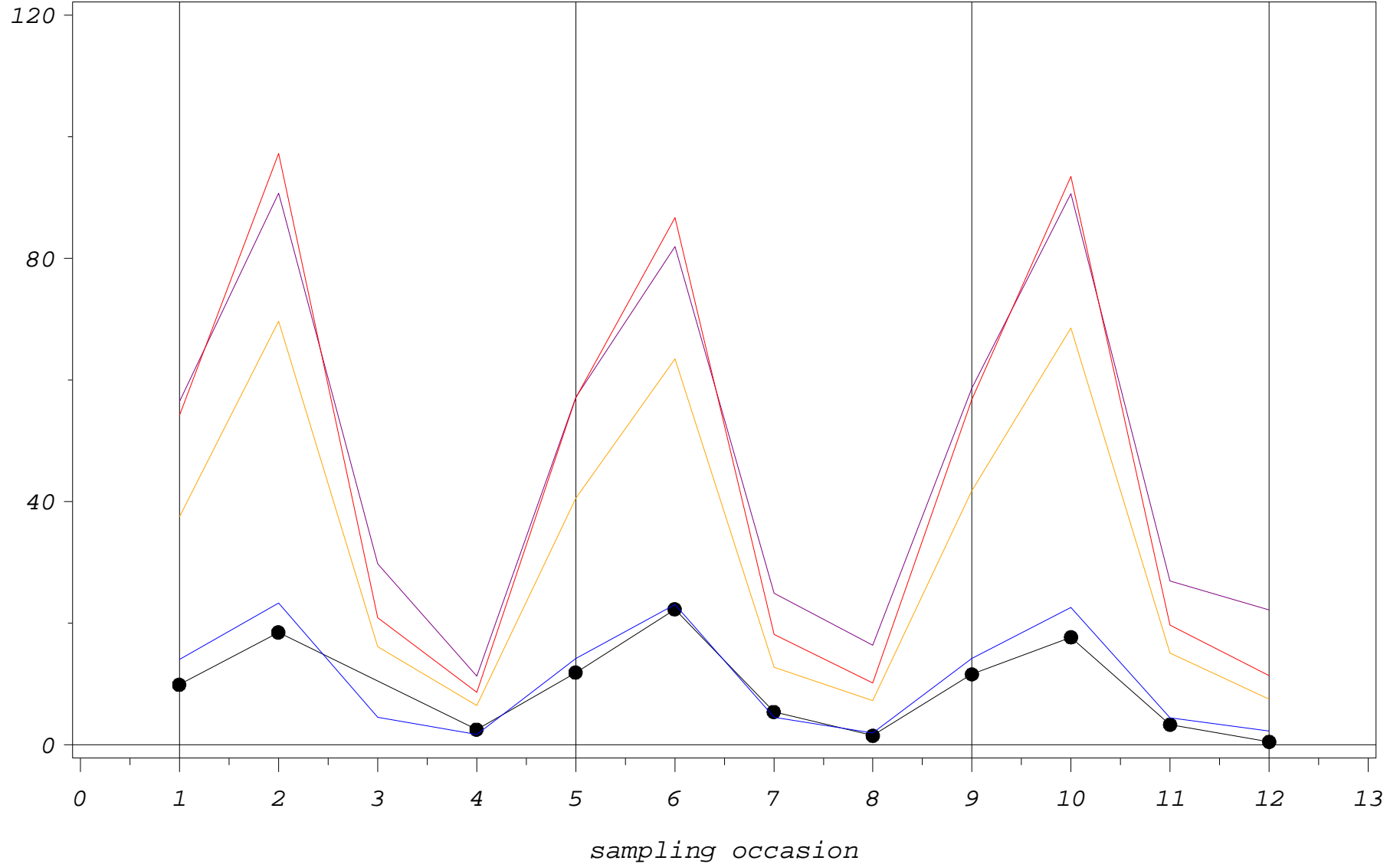


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02624

cortisol (nmol/l)

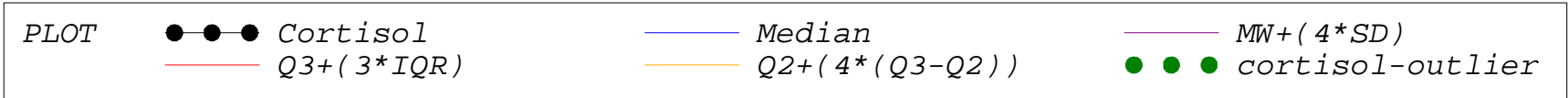
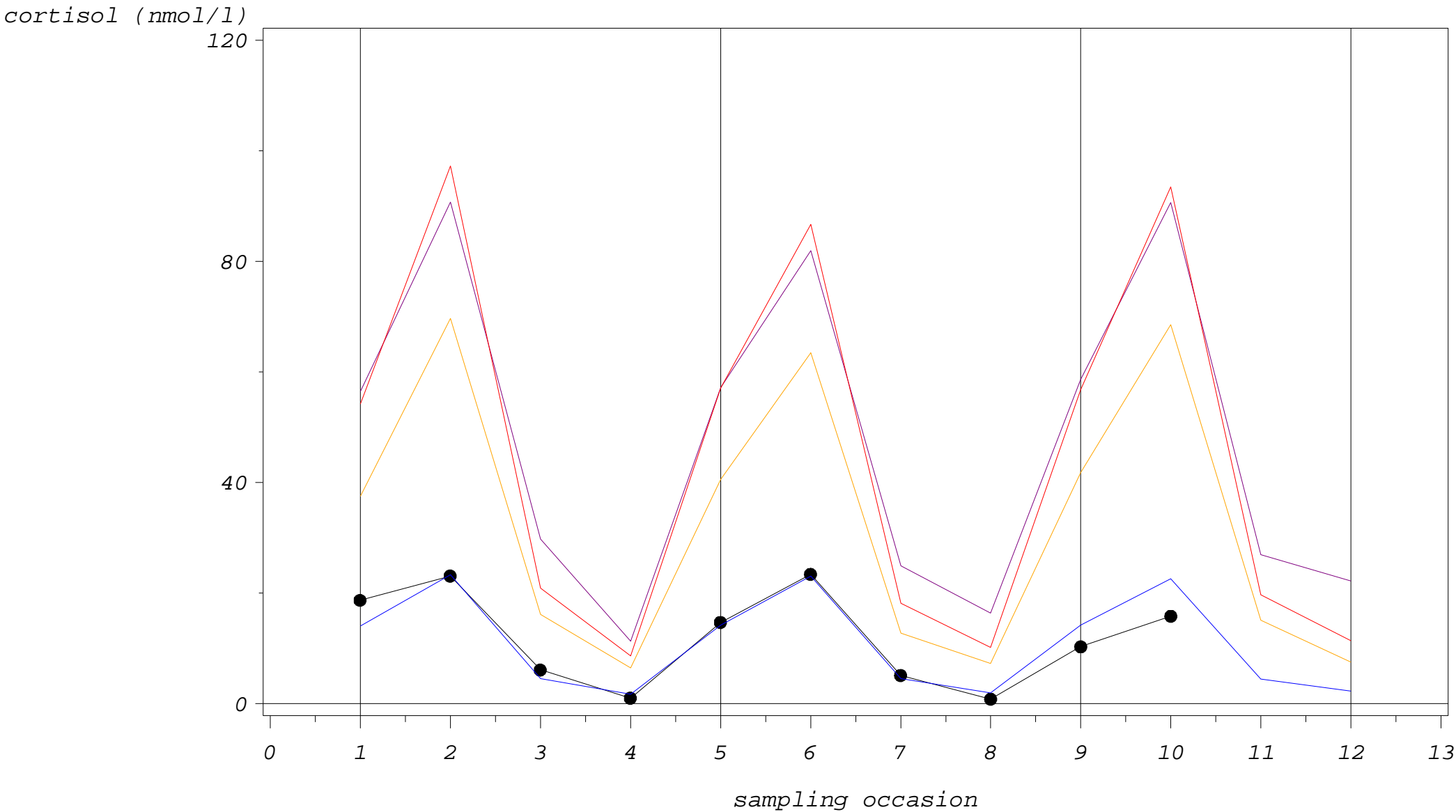


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

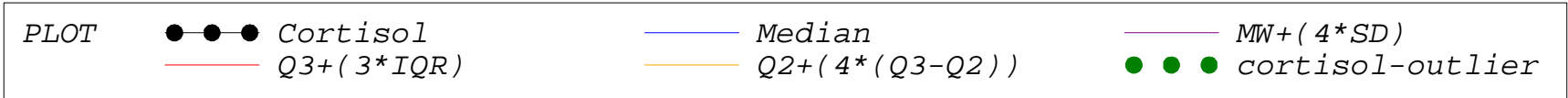
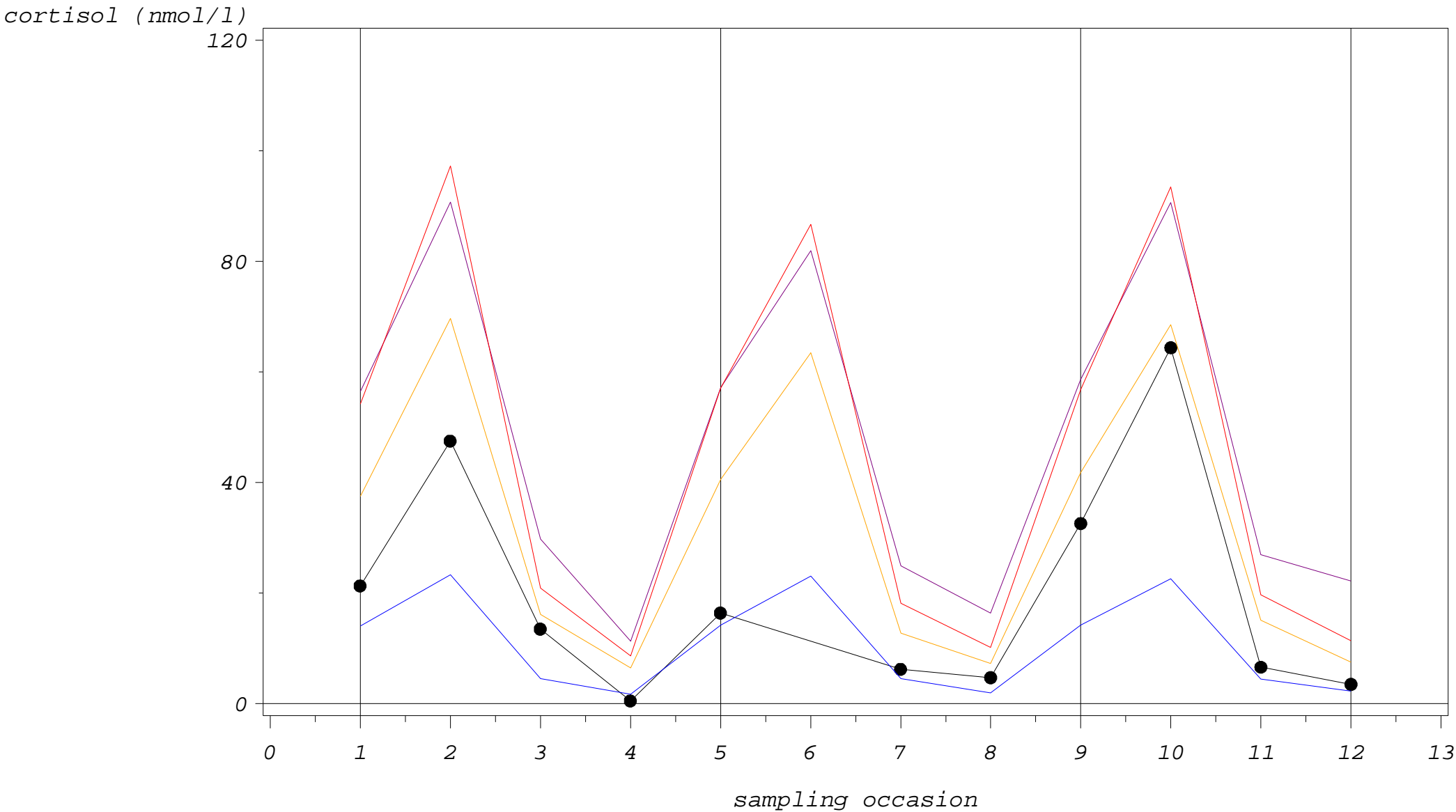
Study 2: cortisol single profiles with outlier fences

CODE=H02625



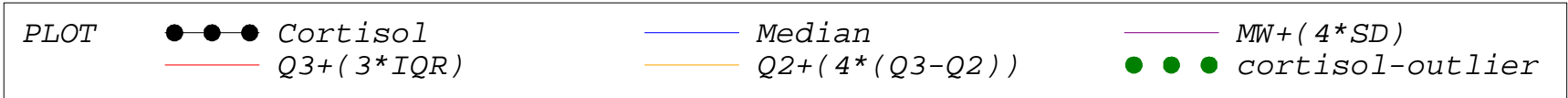
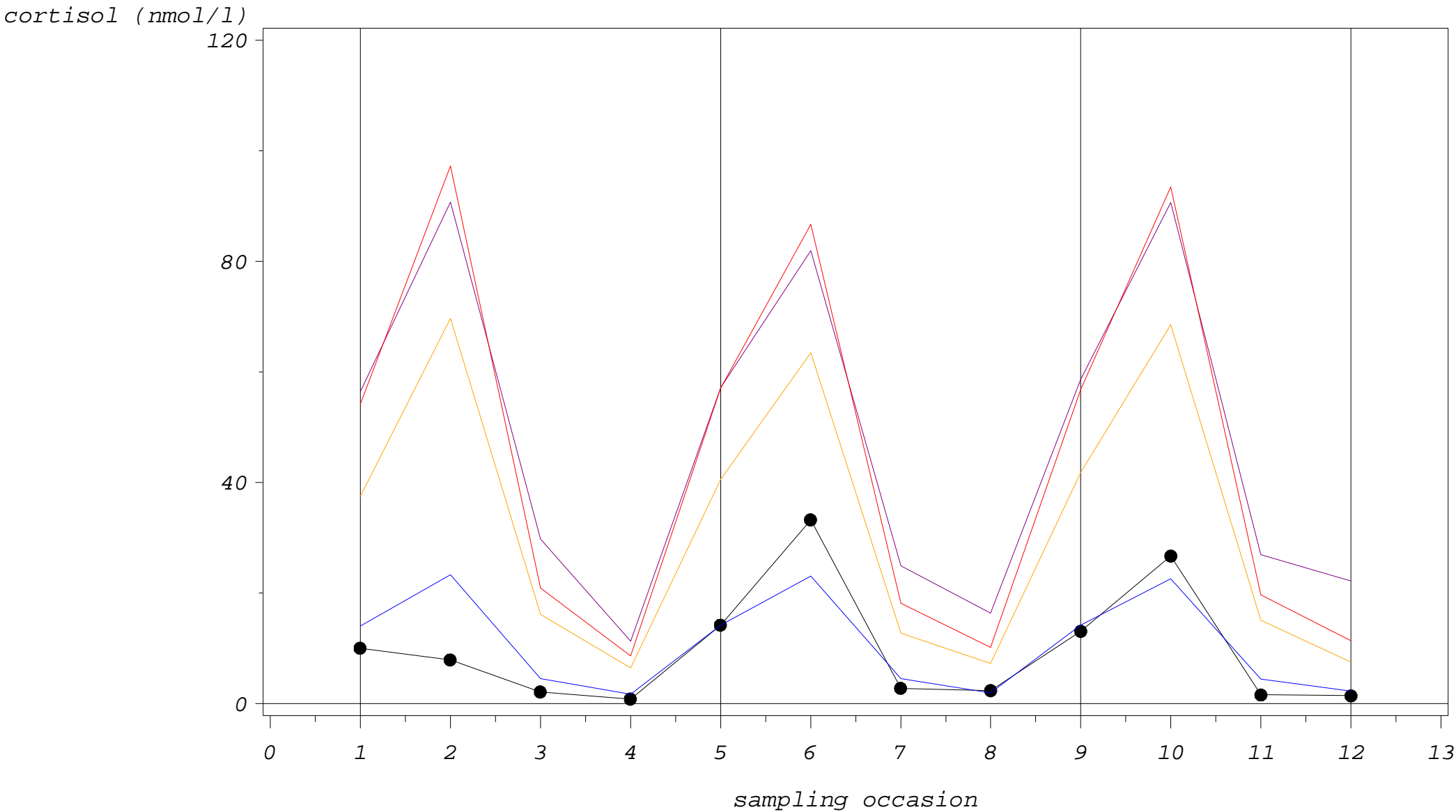
Study 2: cortisol single profiles with outlier fences

CODE=H02626



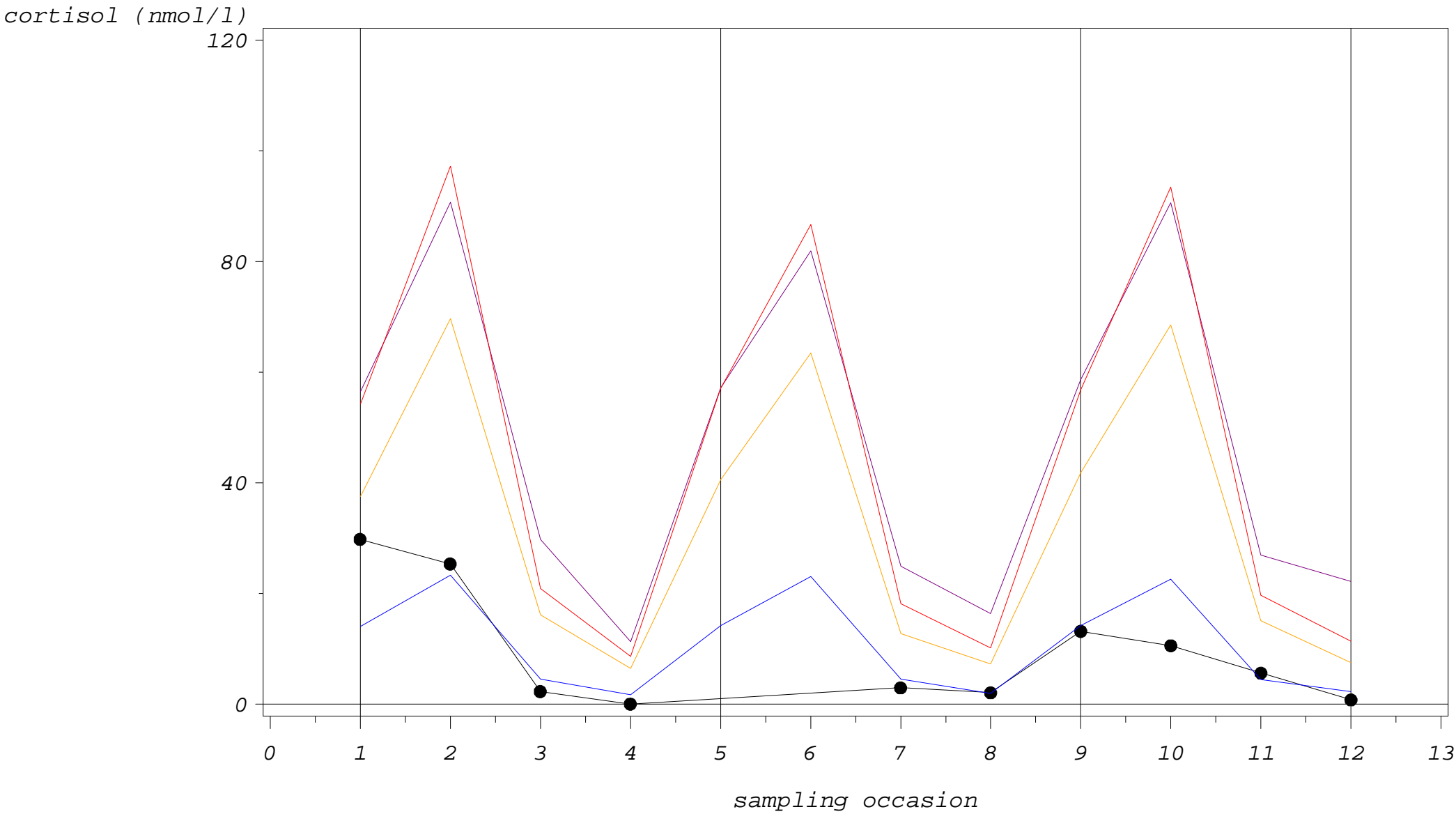
Study 2: cortisol single profiles with outlier fences

CODE=H02701



Study 2: cortisol single profiles with outlier fences

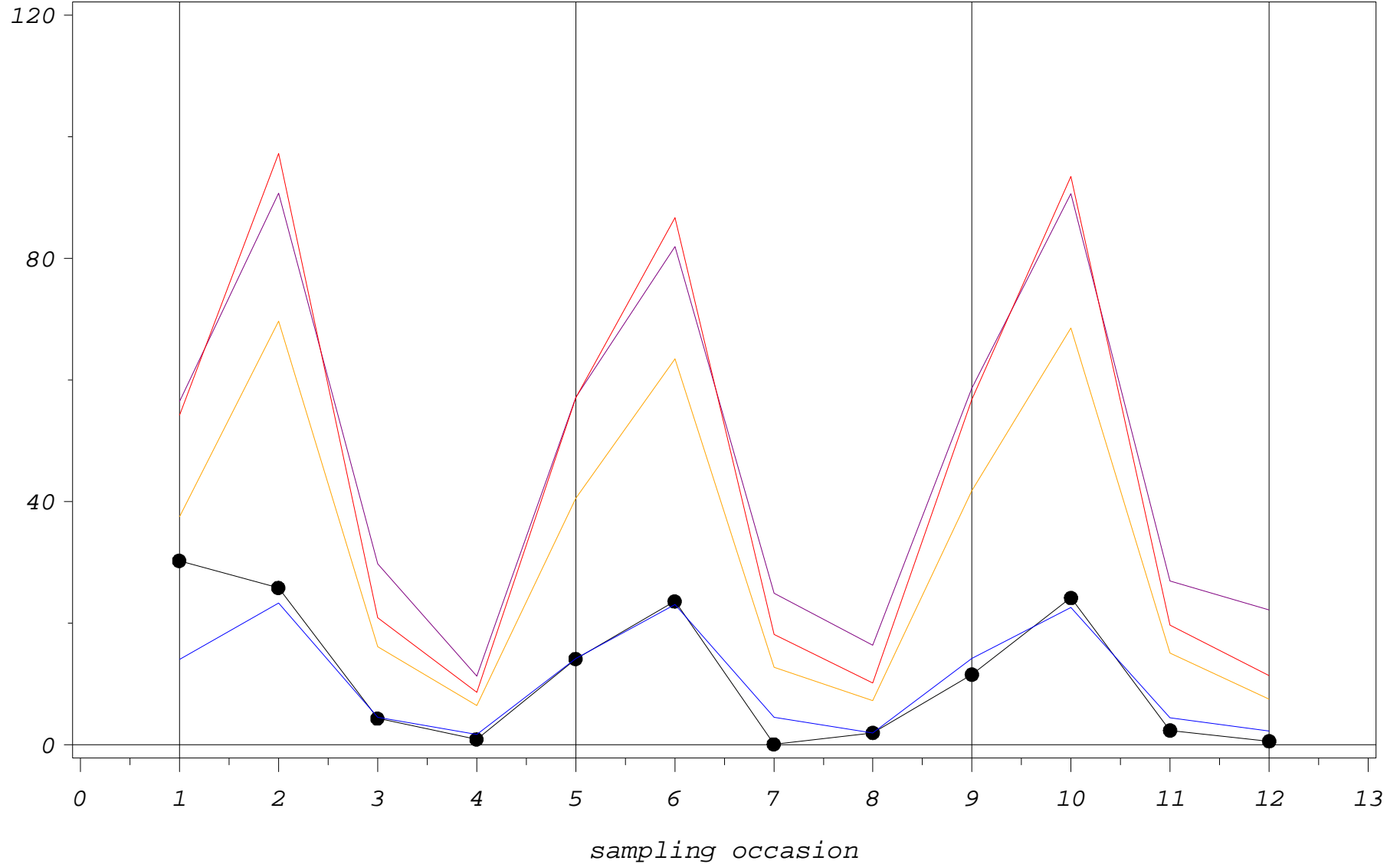
CODE=H02702



Study 2: cortisol single profiles with outlier fences

CODE=H02703

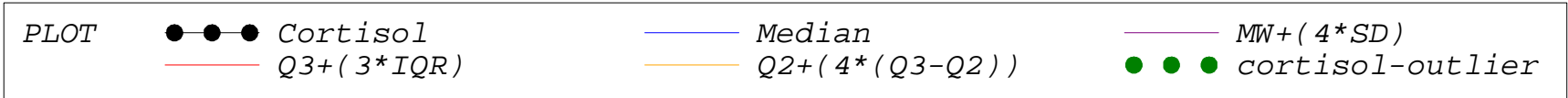
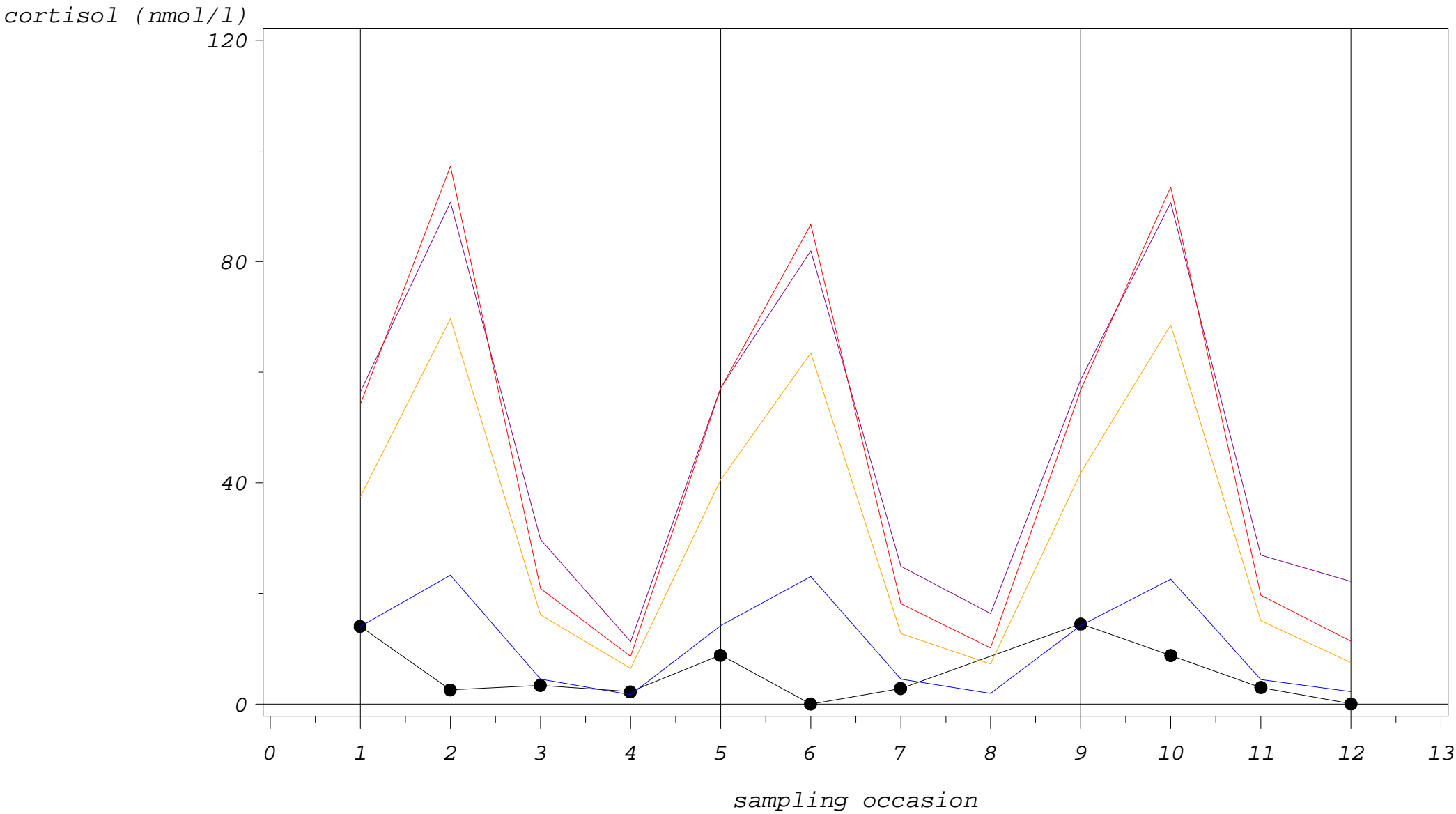
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 \times SD)$
 — $Q3 + (3 \times IQR)$ — $Q2 + (4 \times (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

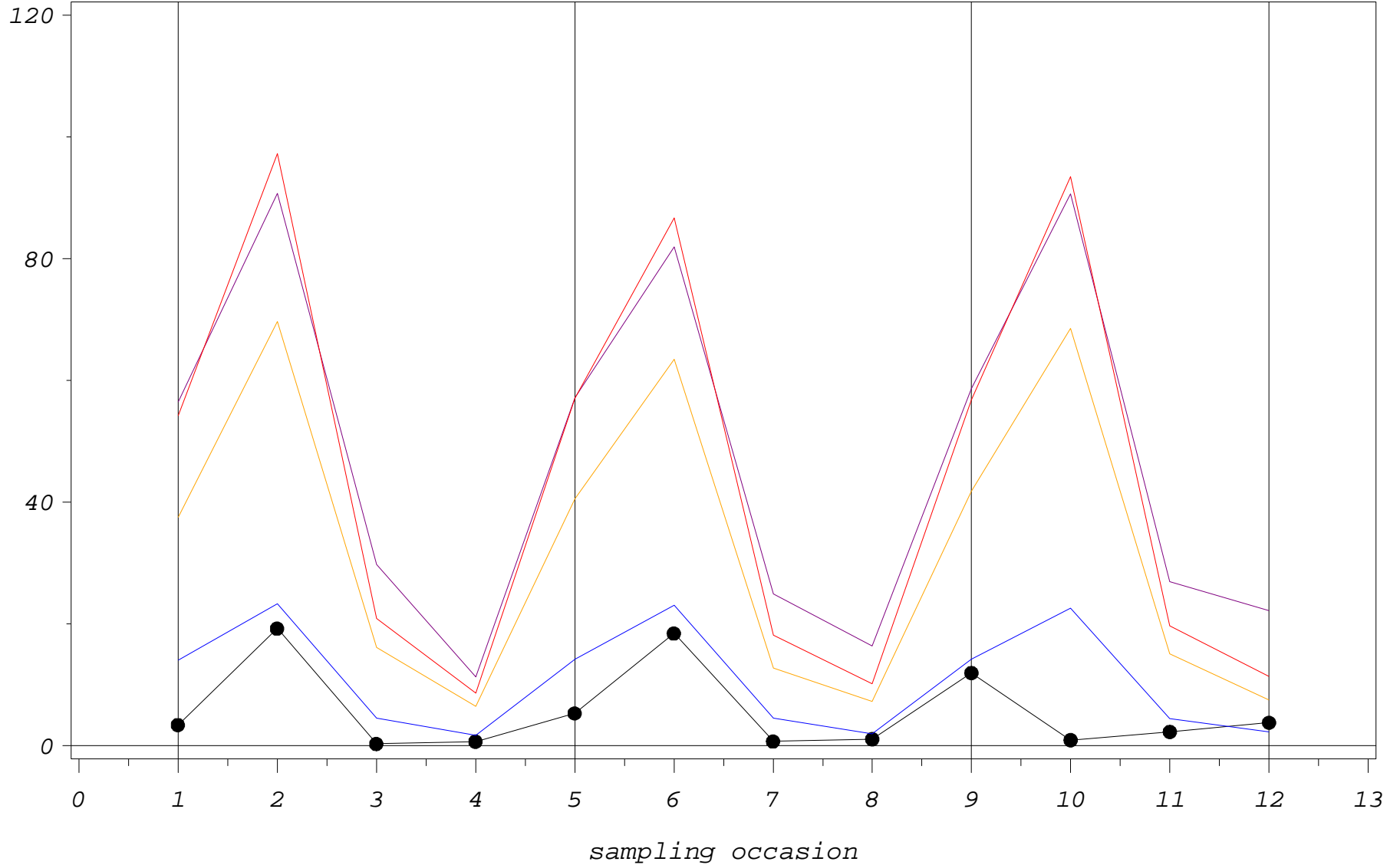
CODE=H02704



Study 2: cortisol single profiles with outlier fences

CODE=H02705

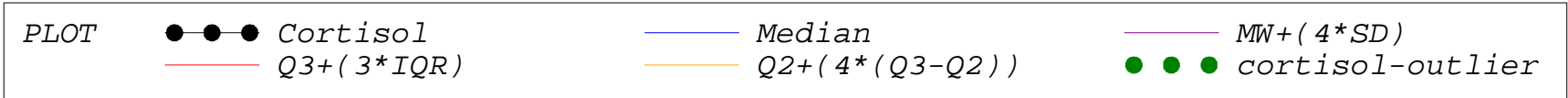
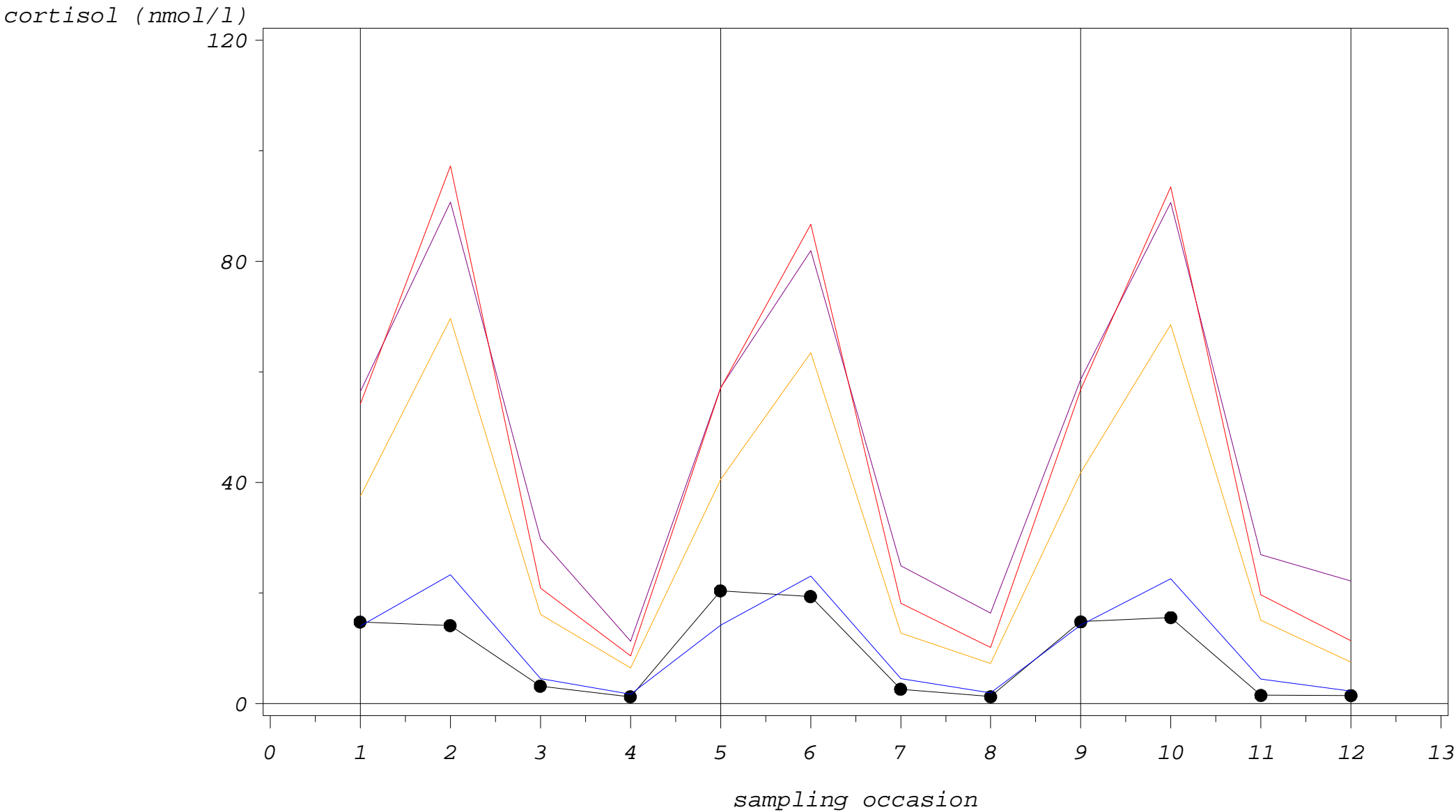
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

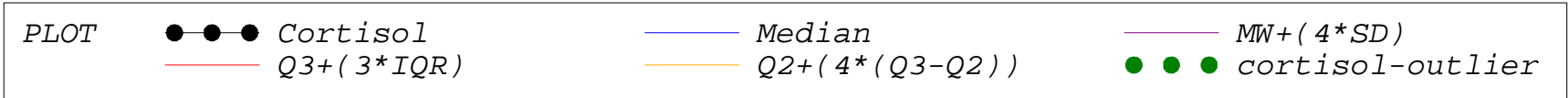
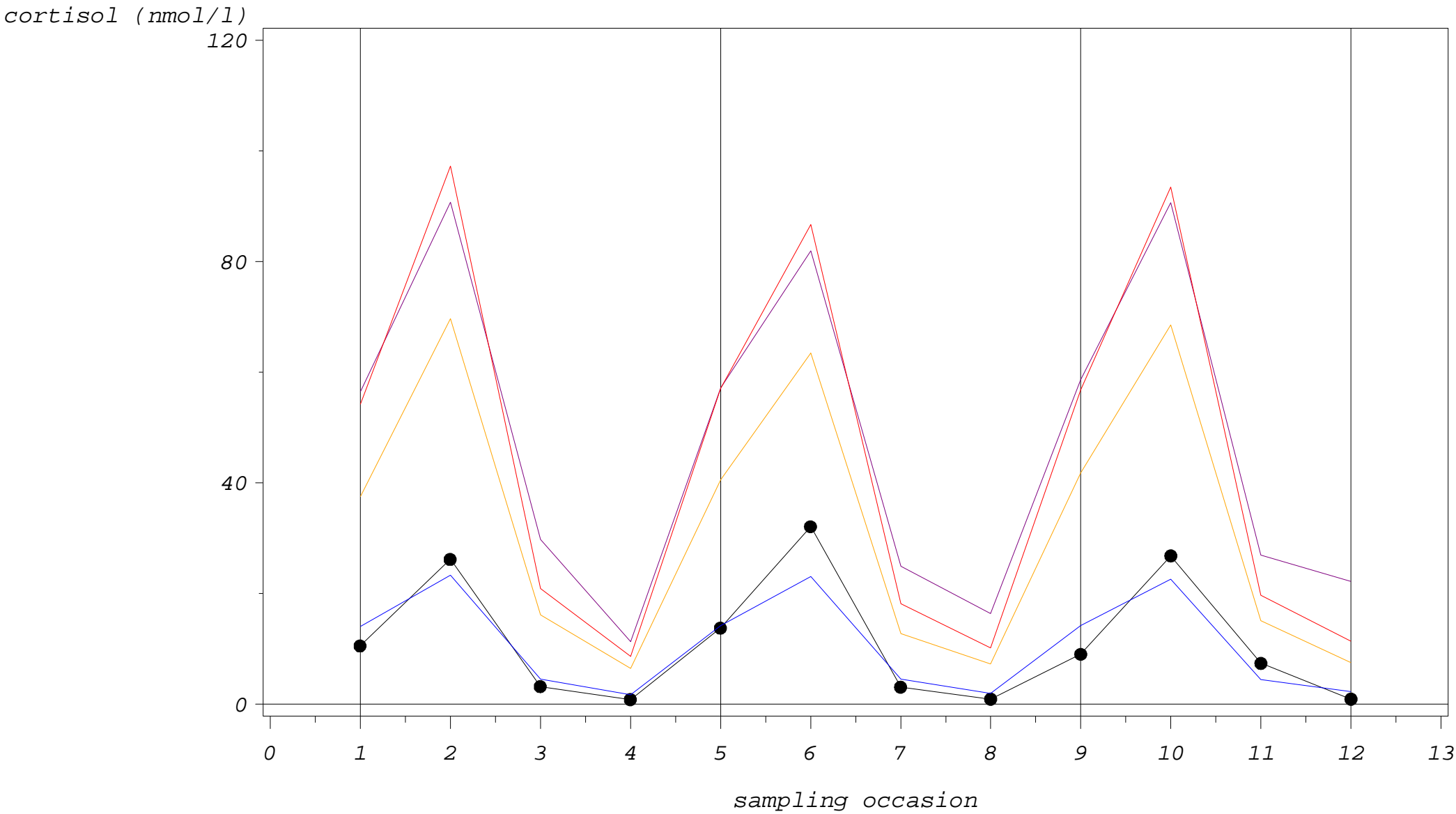
Study 2: cortisol single profiles with outlier fences

CODE=H02706



Study 2: cortisol single profiles with outlier fences

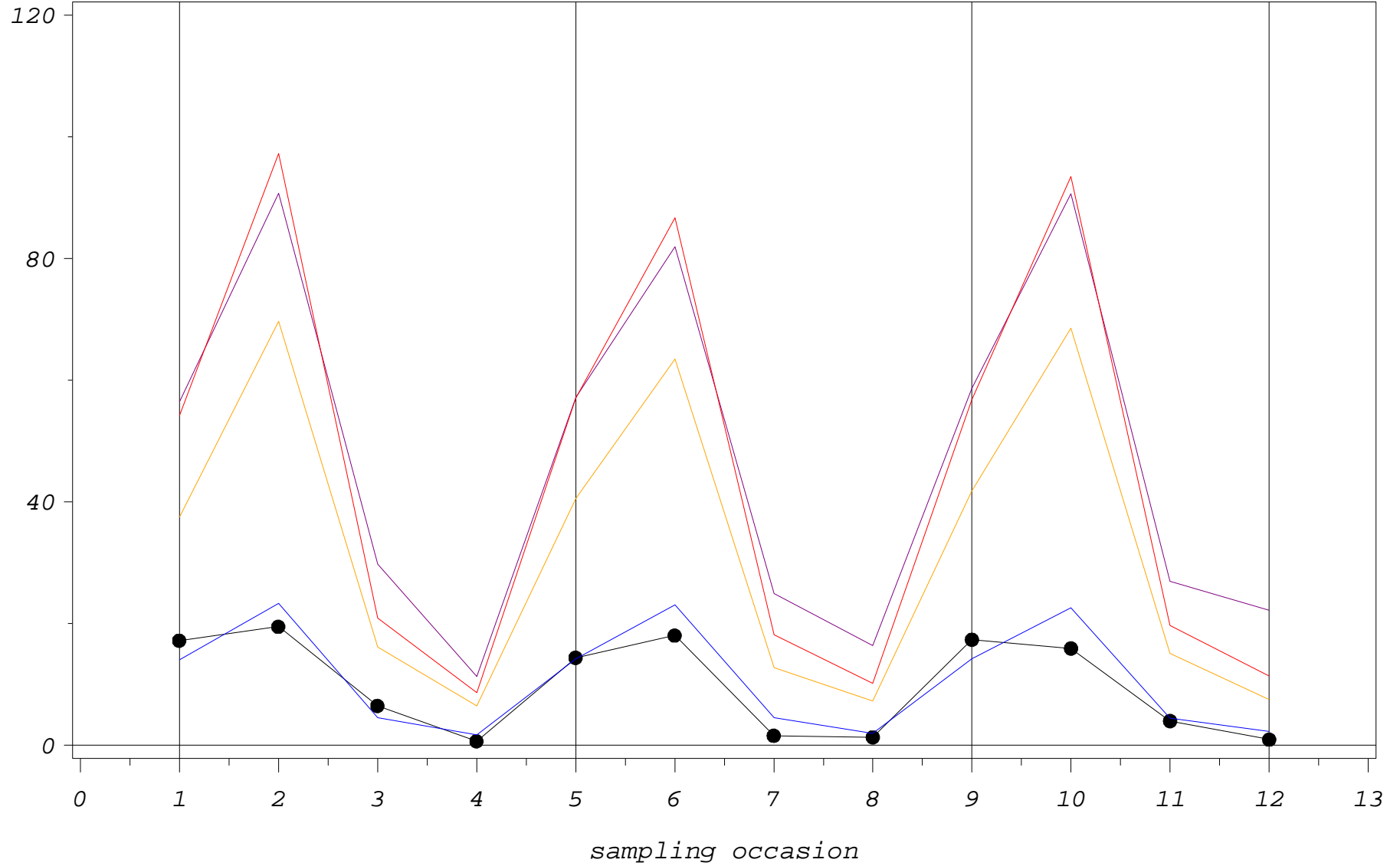
CODE=H02707



Study 2: cortisol single profiles with outlier fences

CODE=H02708

cortisol (nmol/l)

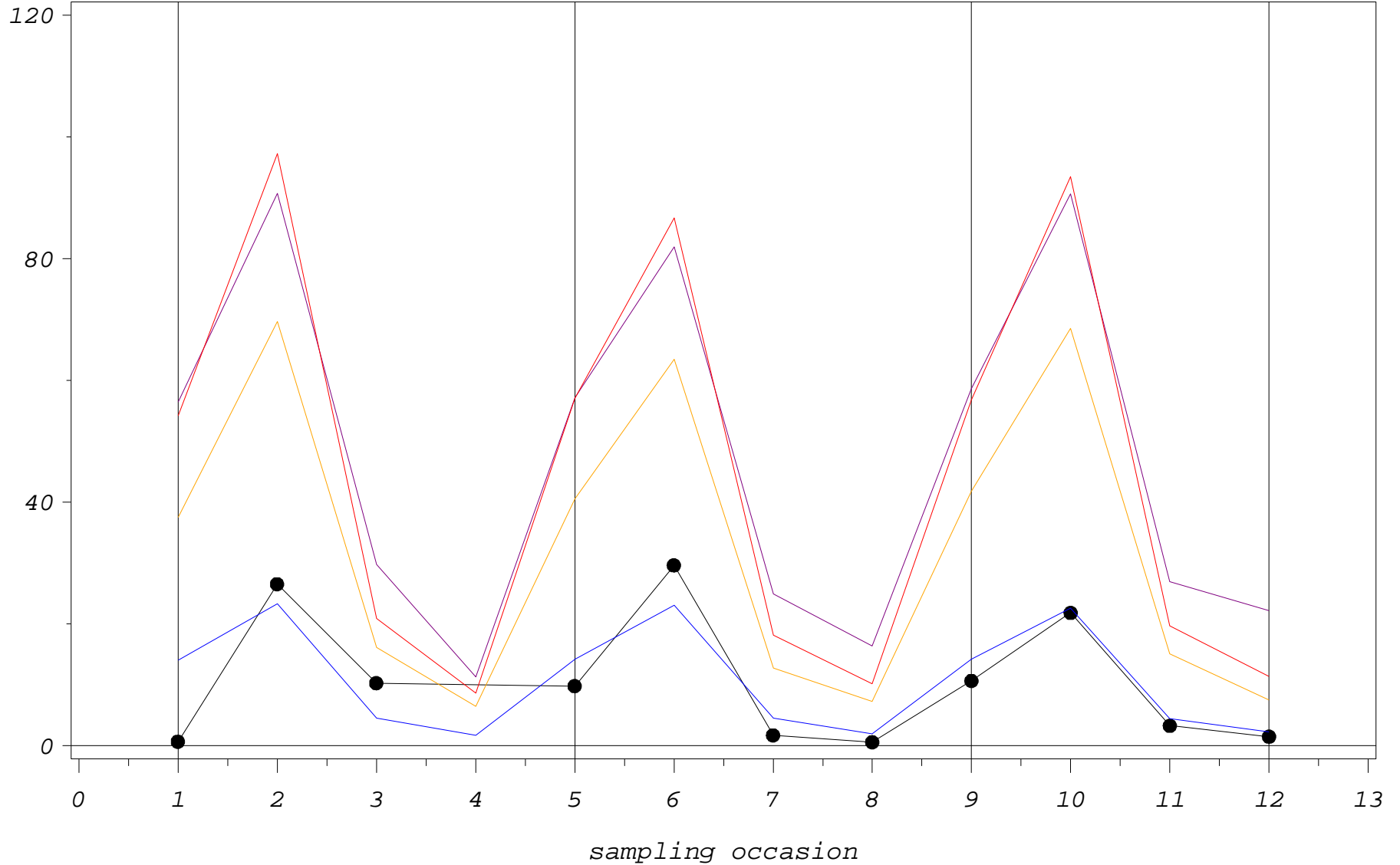


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02709

cortisol (nmol/l)

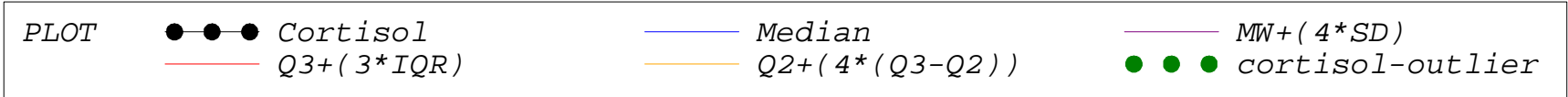
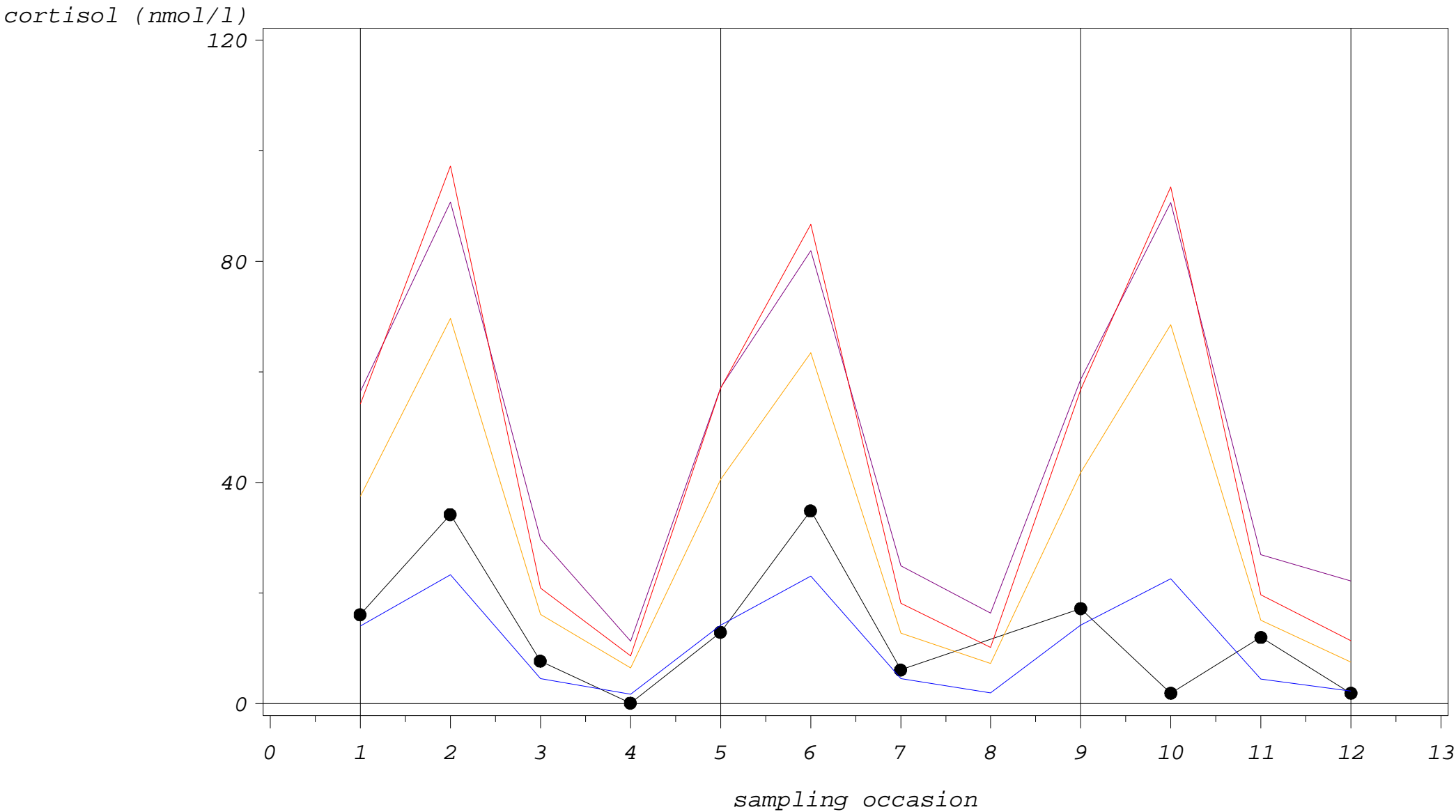


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

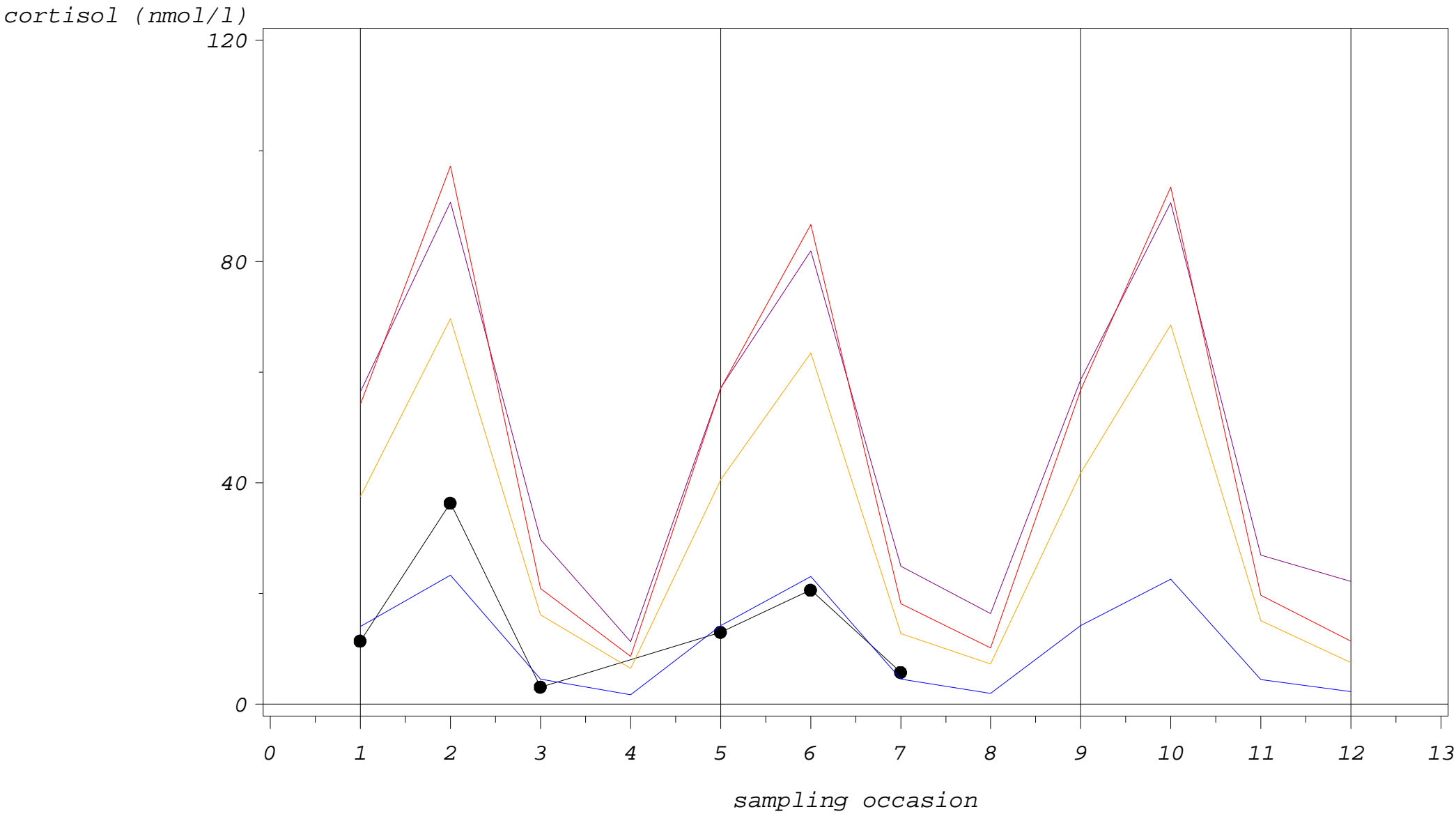
Study 2: cortisol single profiles with outlier fences

CODE=H02710



Study 2: cortisol single profiles with outlier fences

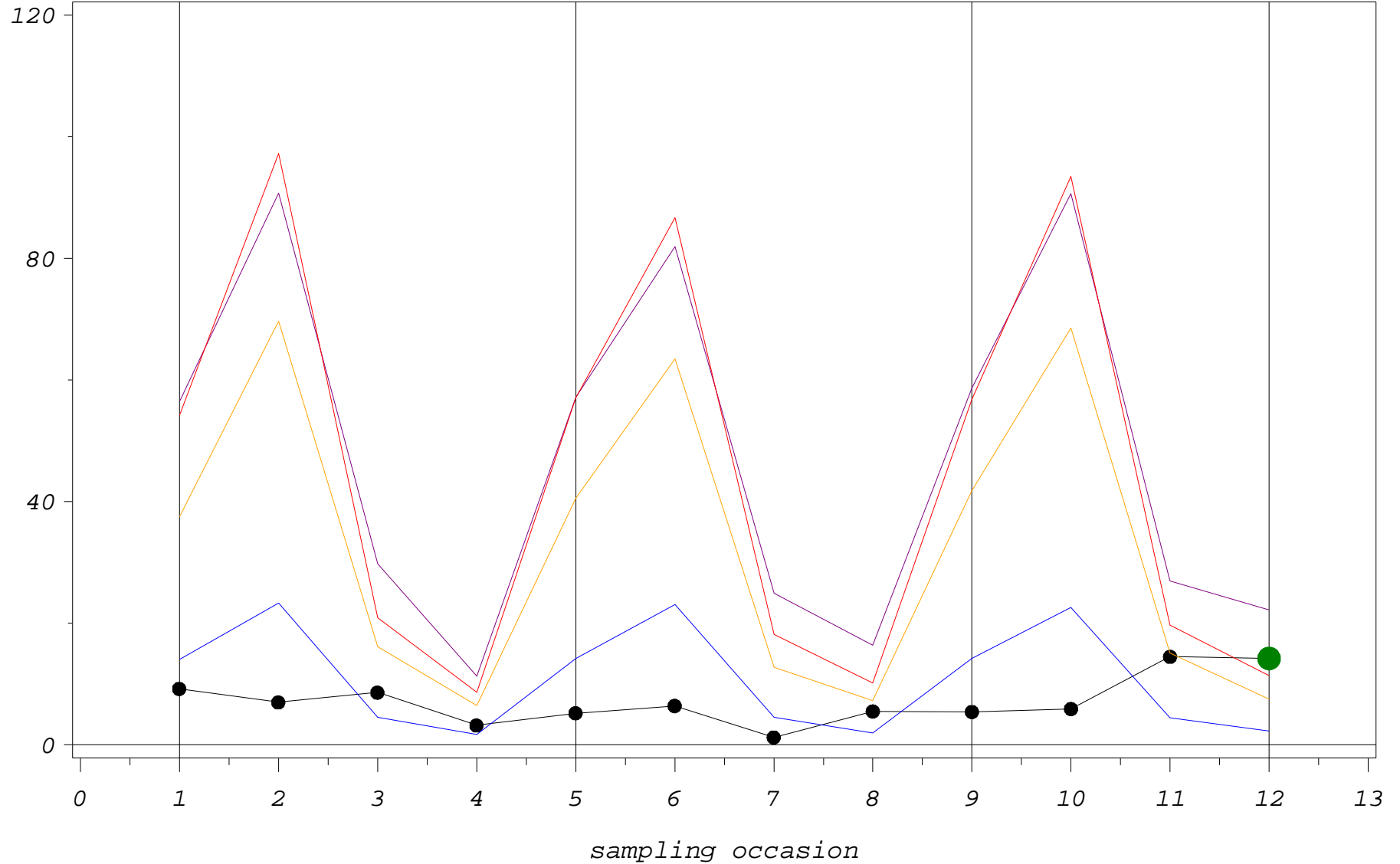
CODE=H02711



Study 2: cortisol single profiles with outlier fences

CODE=H02712

cortisol (nmol/l)

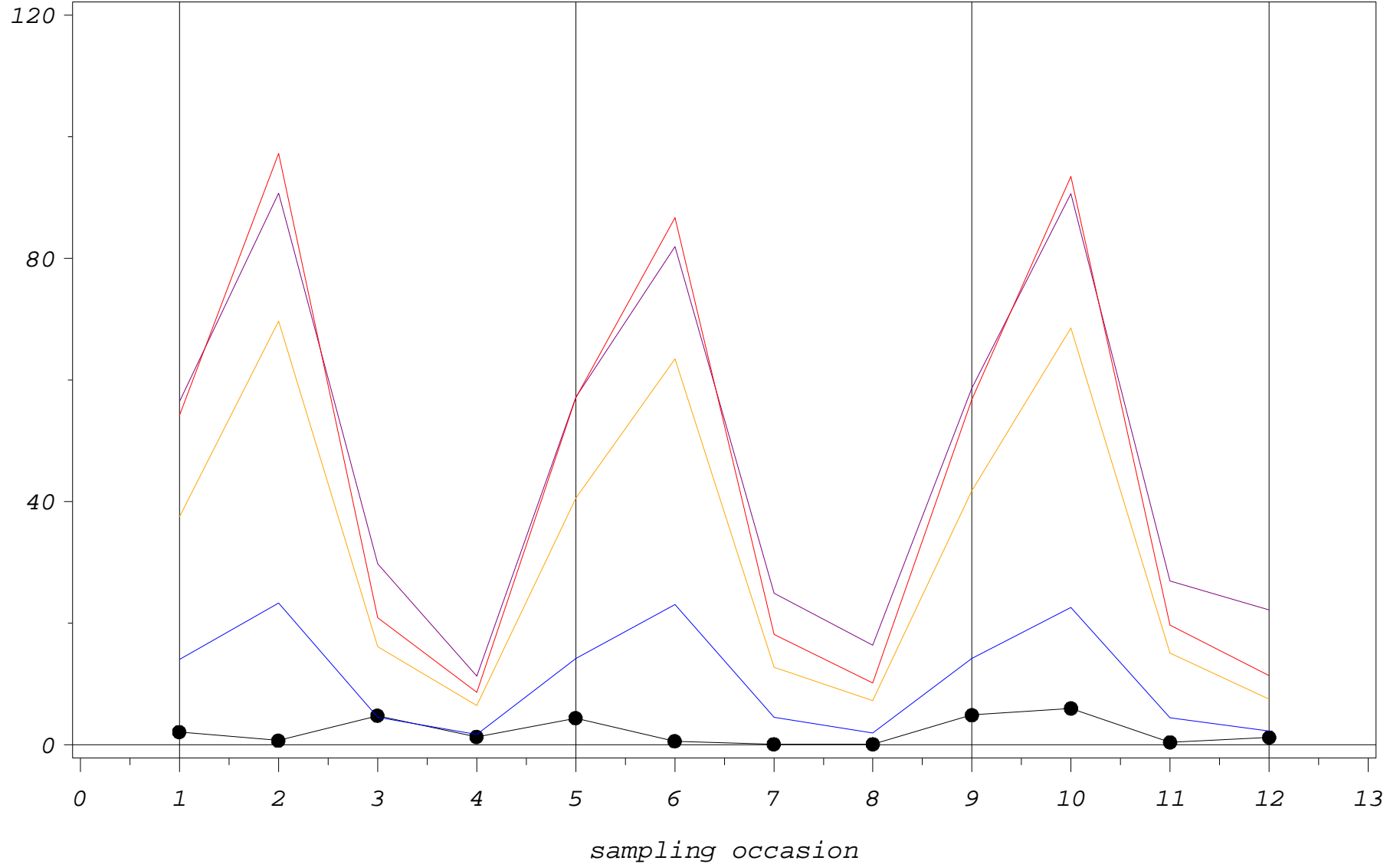


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02713

cortisol (nmol/l)

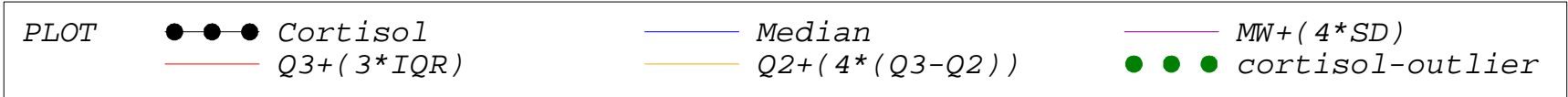
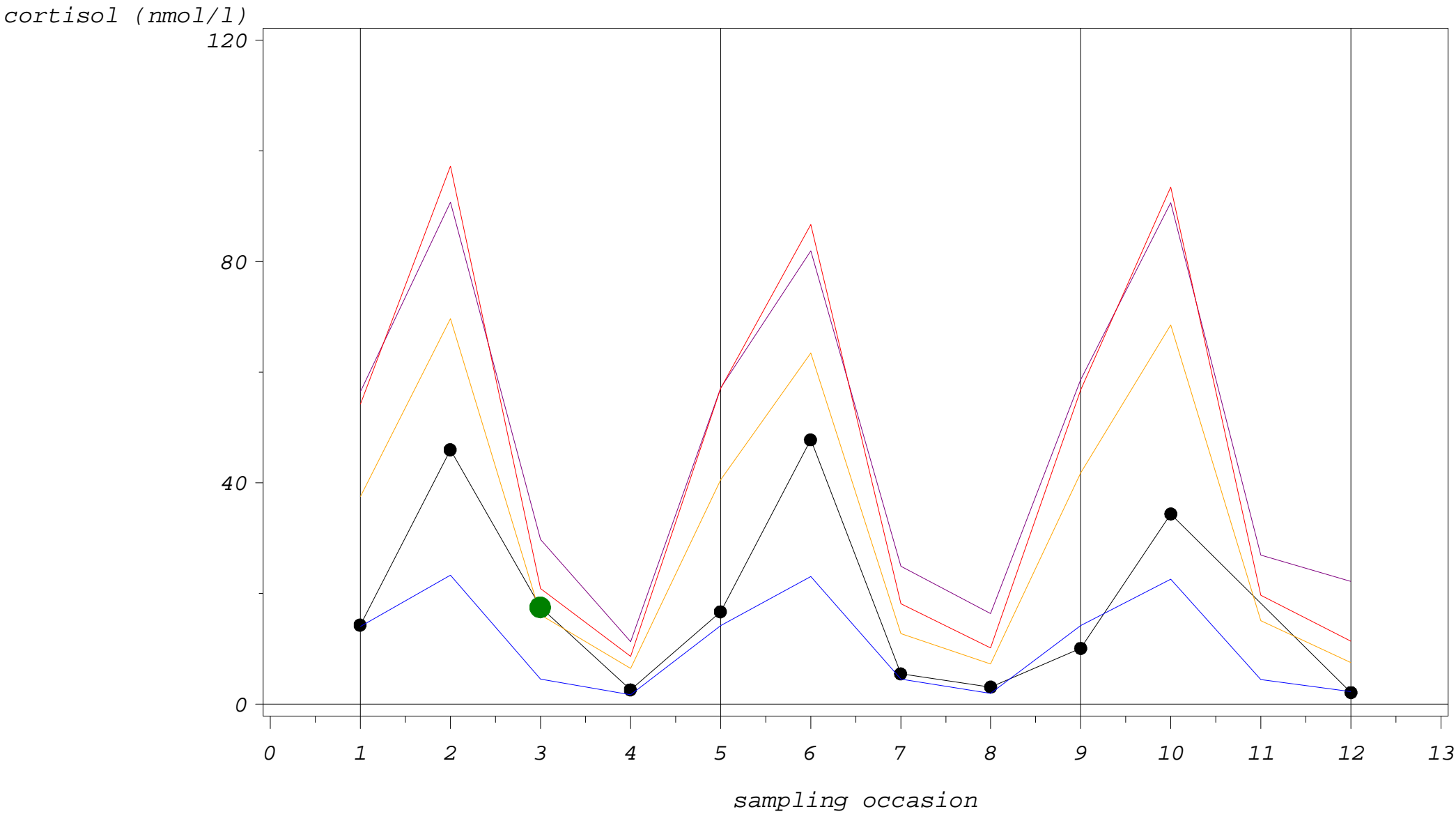


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

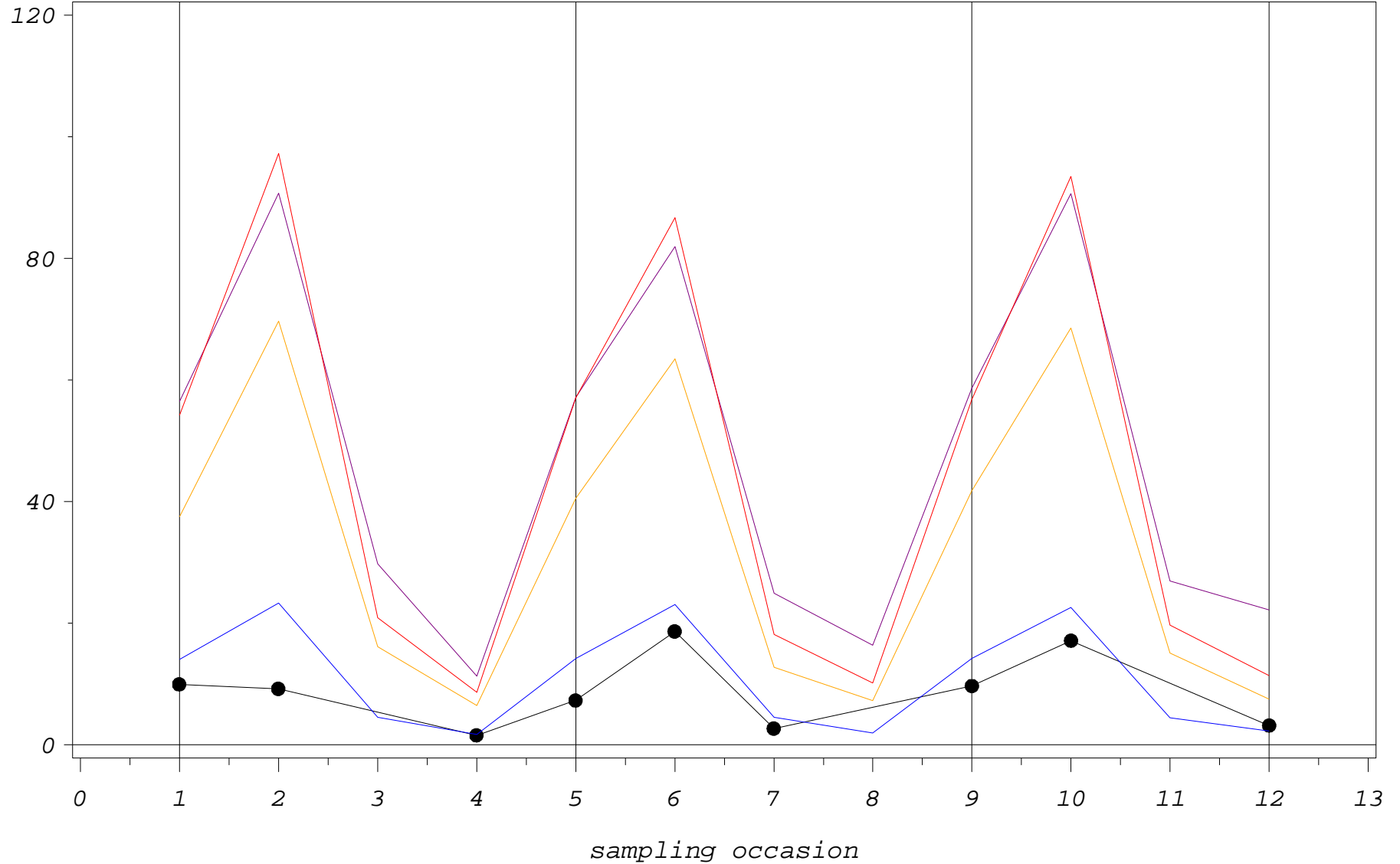
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Study 2: cortisol single profiles with outlier fences

CODE=H02715

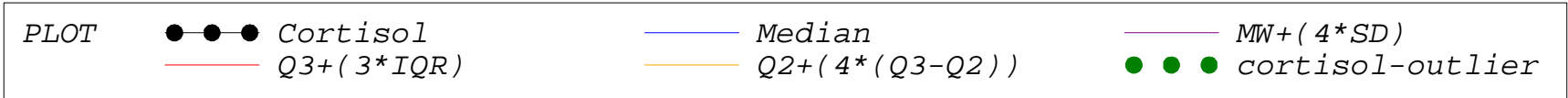
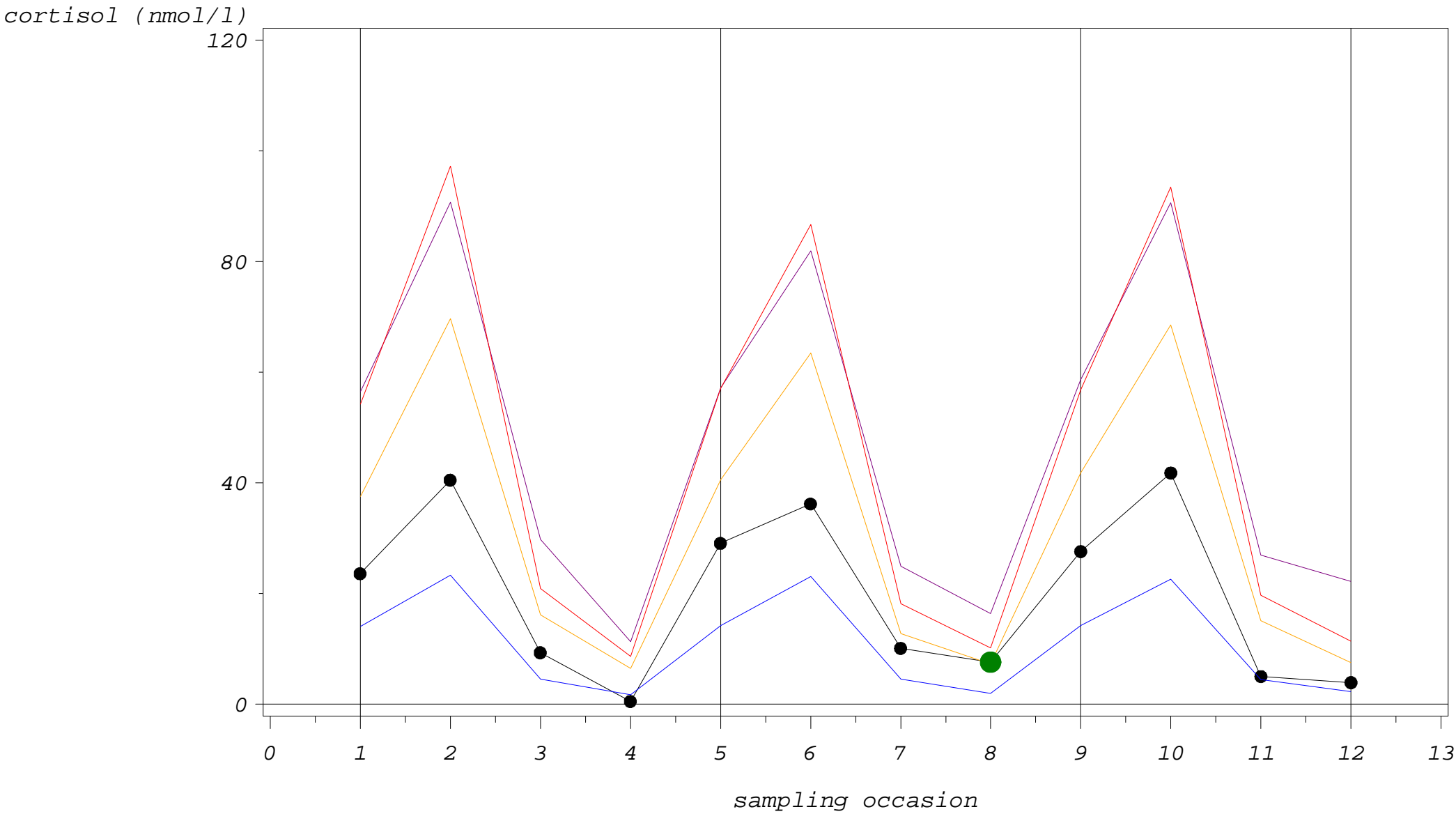
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 \cdot SD)$
 — $Q3 + (3 \cdot IQR)$ — $Q2 + (4 \cdot (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

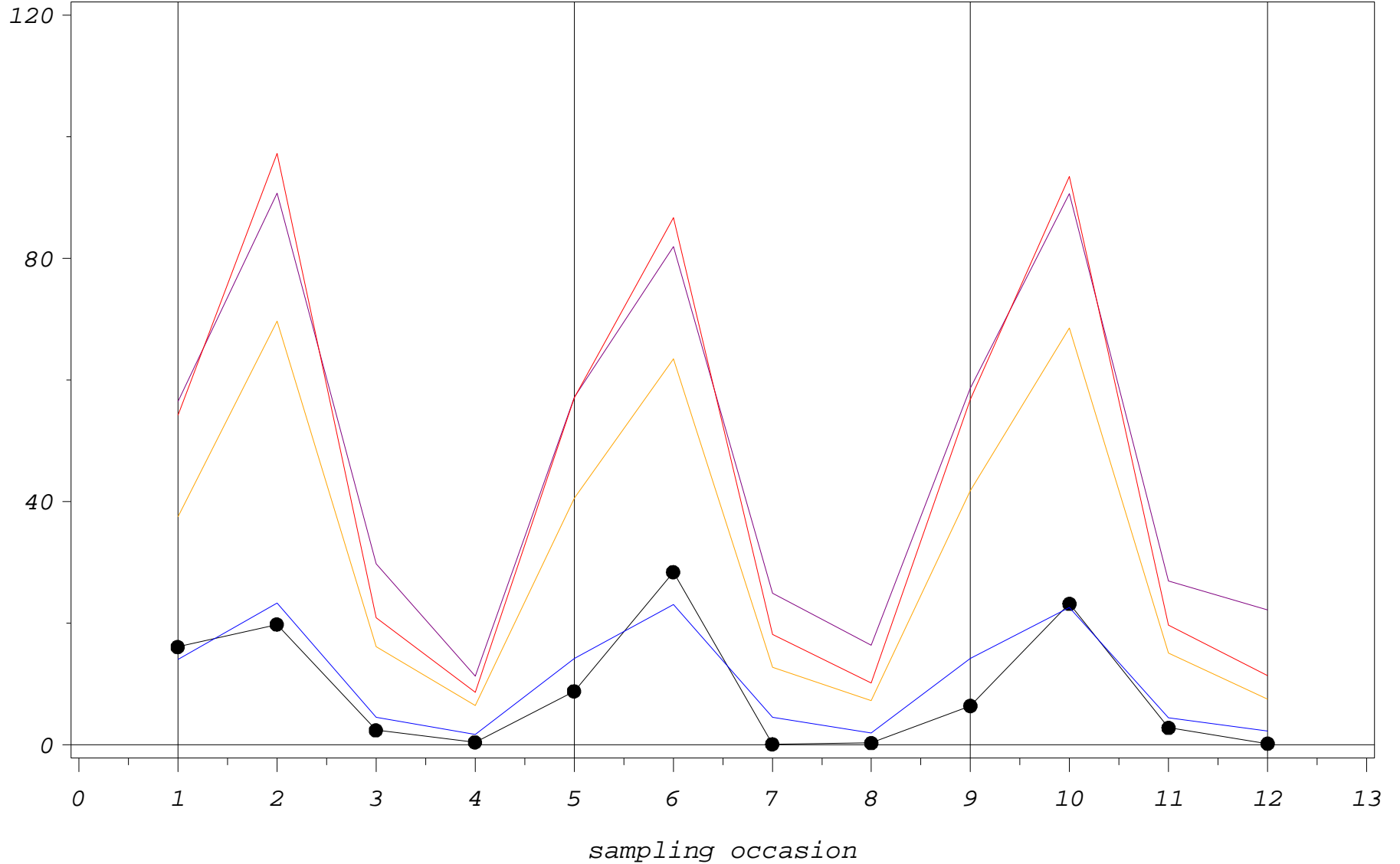
CODE=H02716



Study 2: cortisol single profiles with outlier fences

CODE=H02717

cortisol (nmol/l)



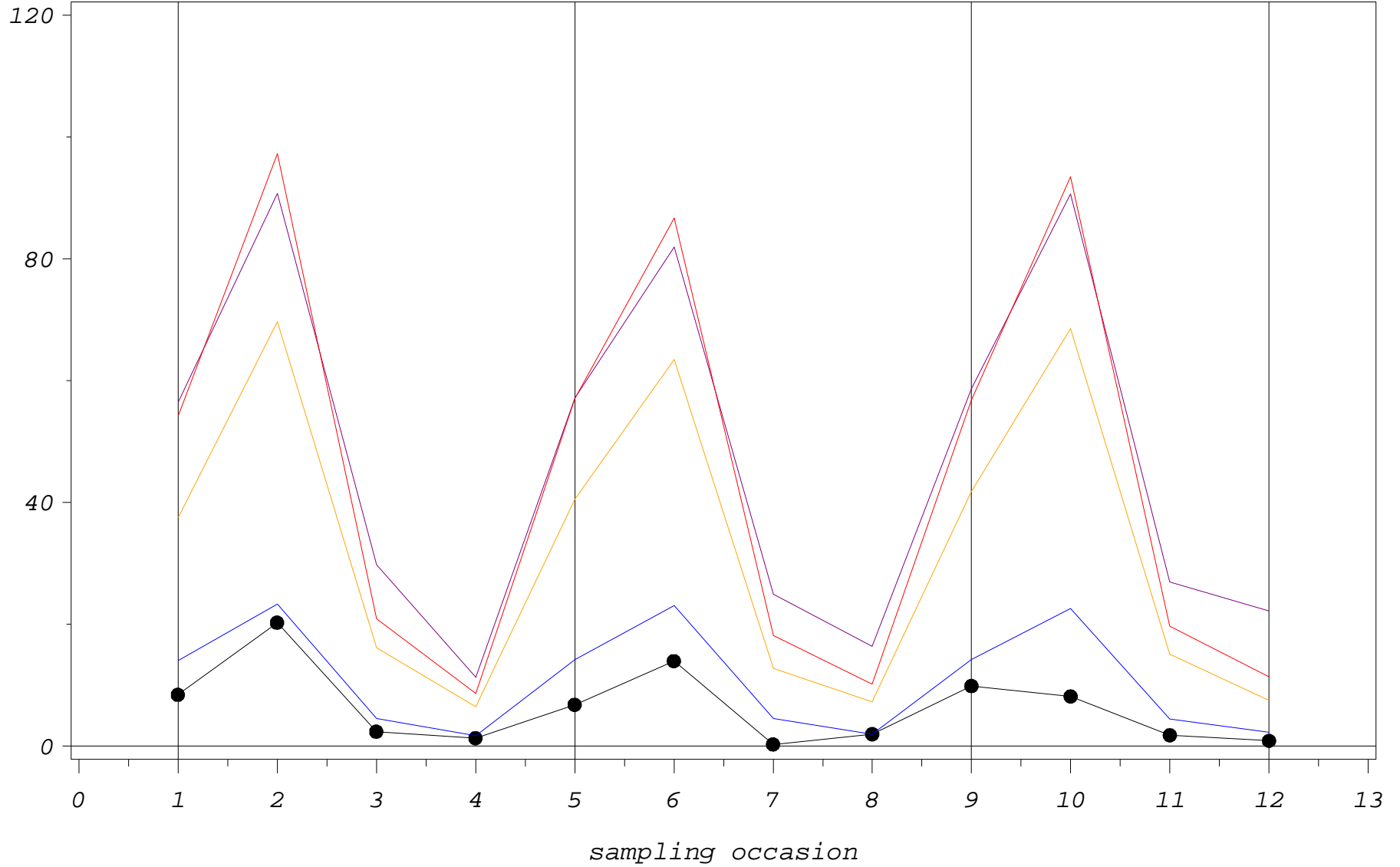
PLOT

●—●—●	Cortisol	—	Median	—	$MW + (4 * SD)$
—	$Q3 + (3 * IQR)$	—	$Q2 + (4 * (Q3 - Q2))$	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02718

cortisol (nmol/l)



PLOT

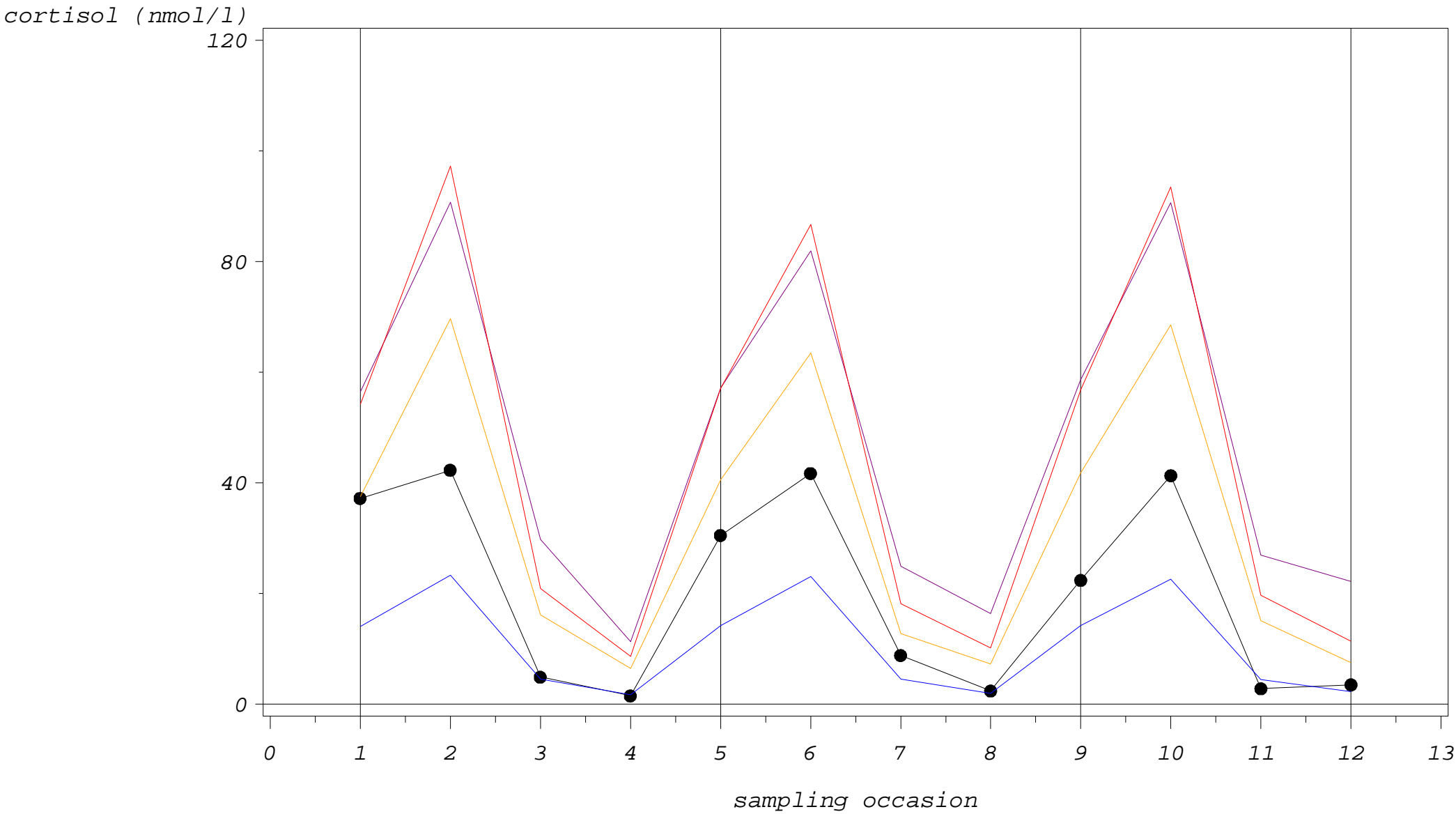
●—●—● Cortisol
— Q3+(3*IQR)

— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
● ● ● cortisol-outlier

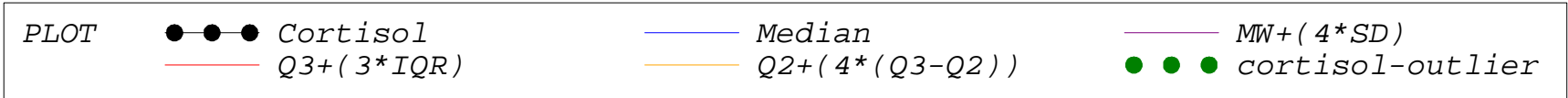
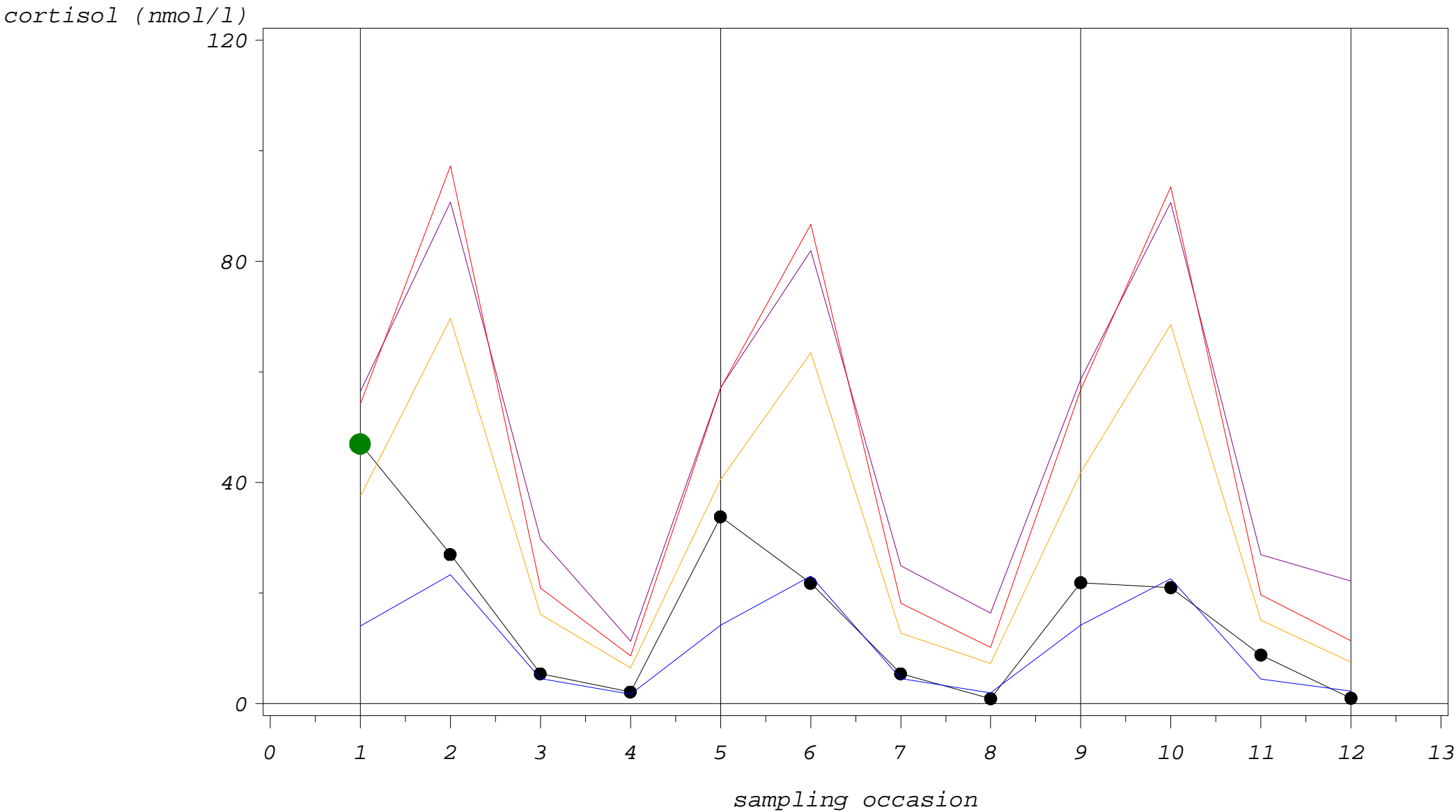
Study 2: cortisol single profiles with outlier fences

CODE=H02719



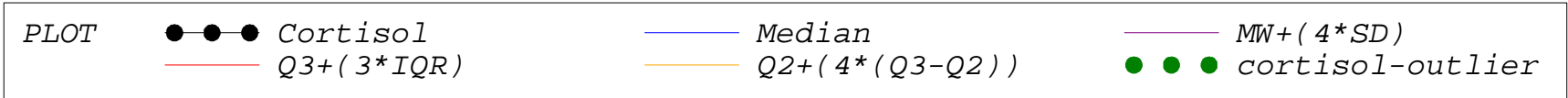
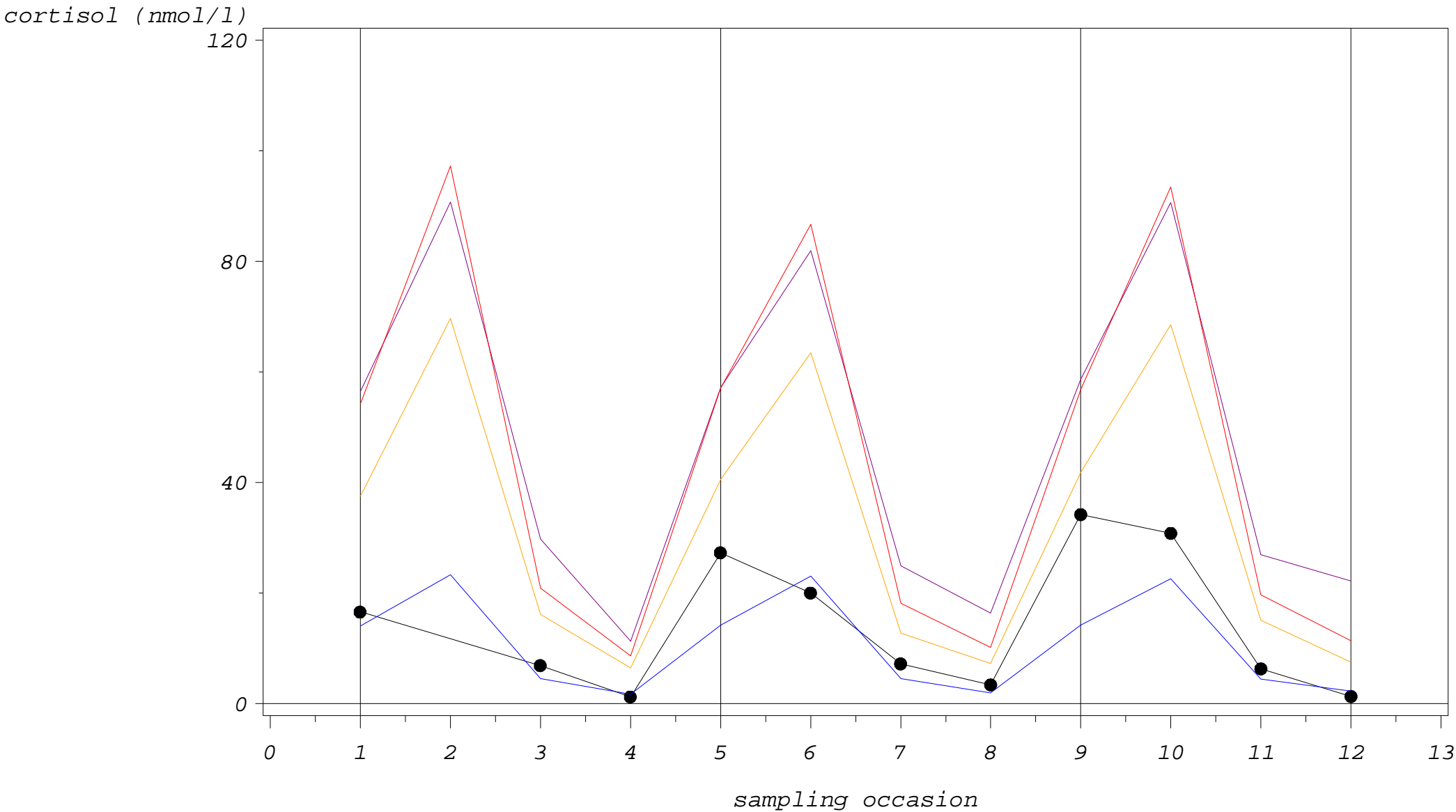
Study 2: cortisol single profiles with outlier fences

CODE=H02801



Study 2: cortisol single profiles with outlier fences

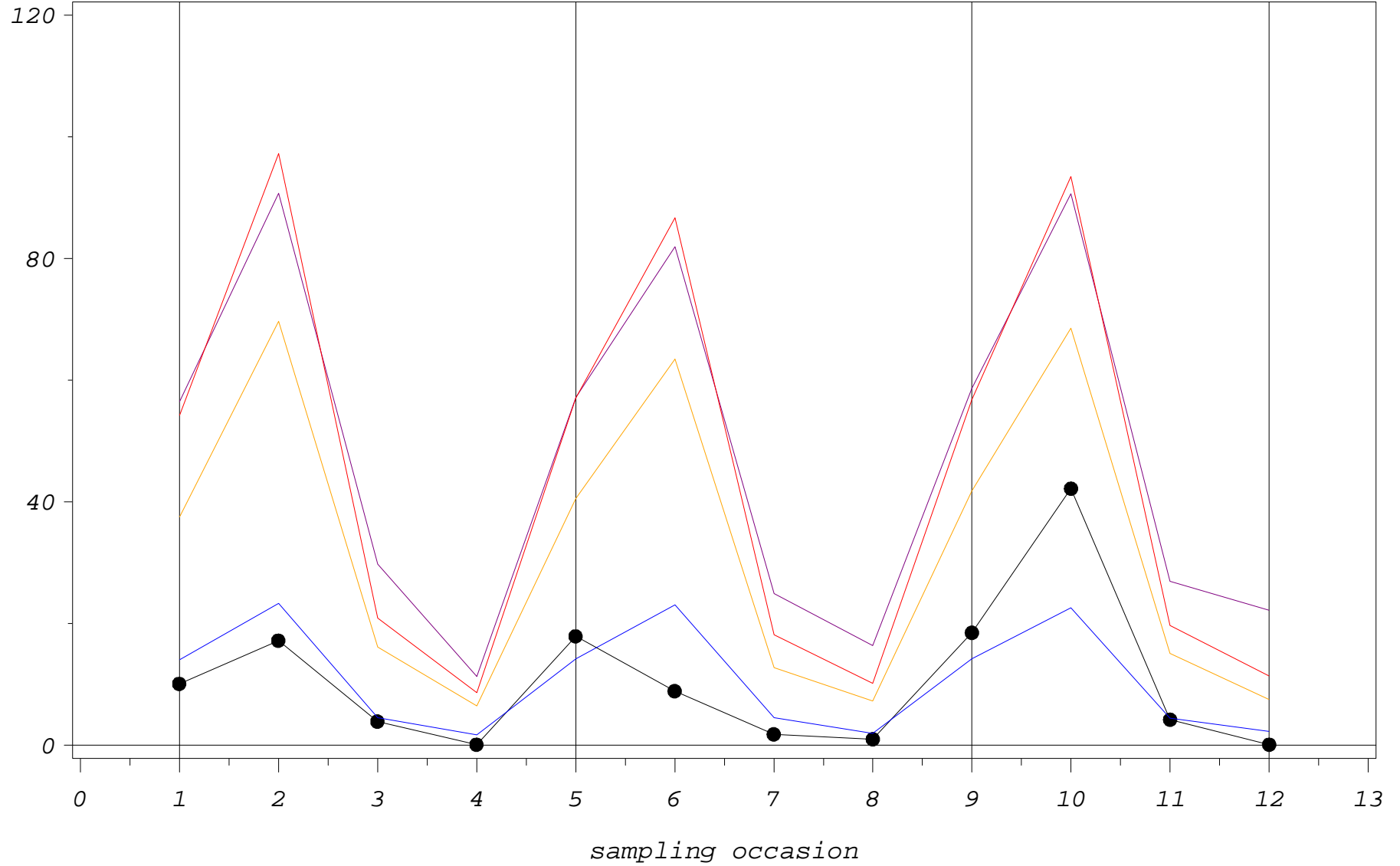
CODE=H02802



Study 2: cortisol single profiles with outlier fences

CODE=H02803

cortisol (nmol/l)



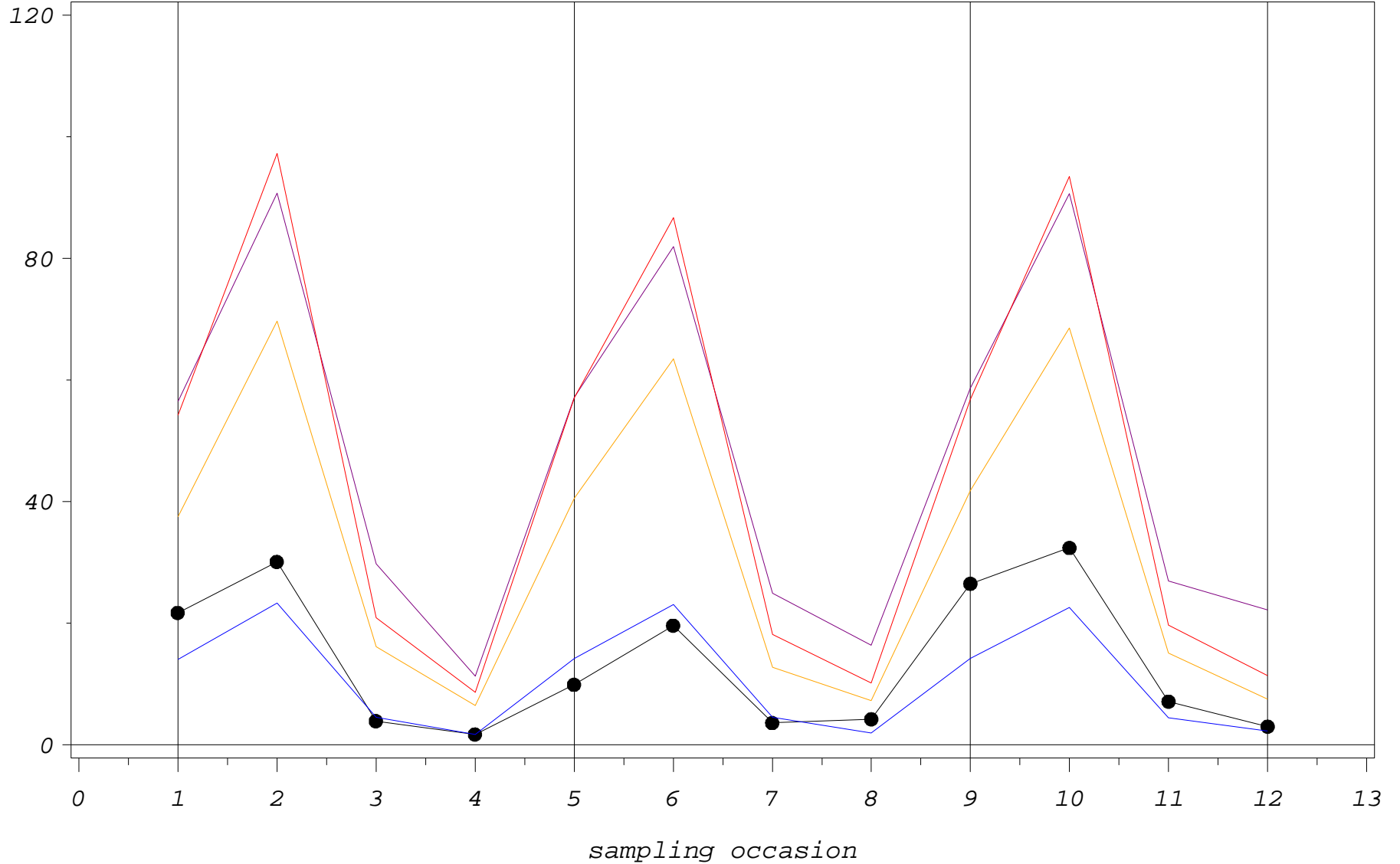
PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02805

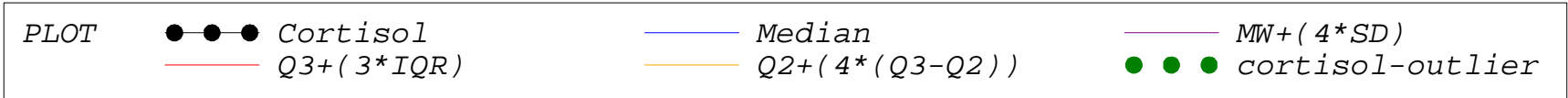
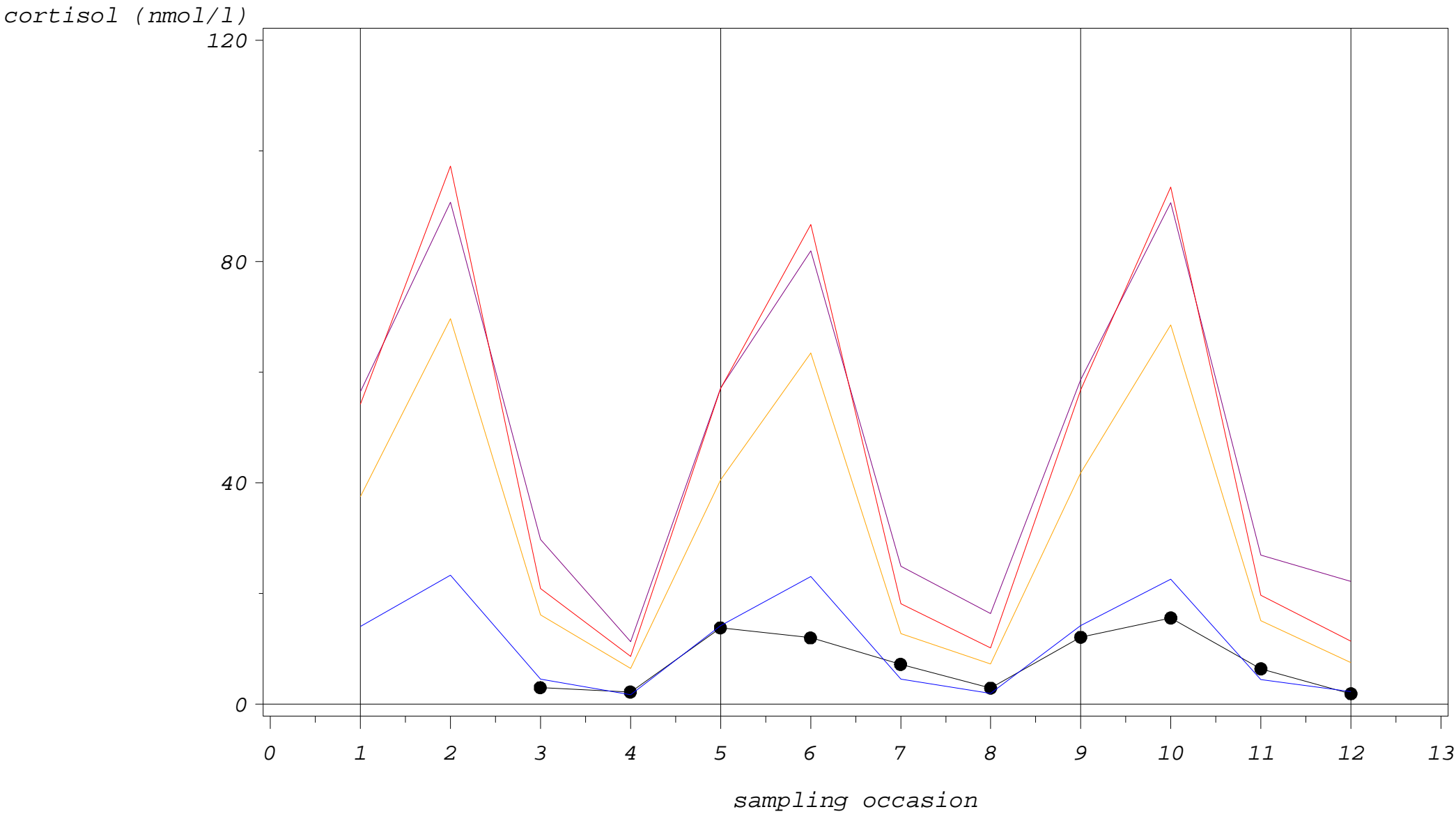
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

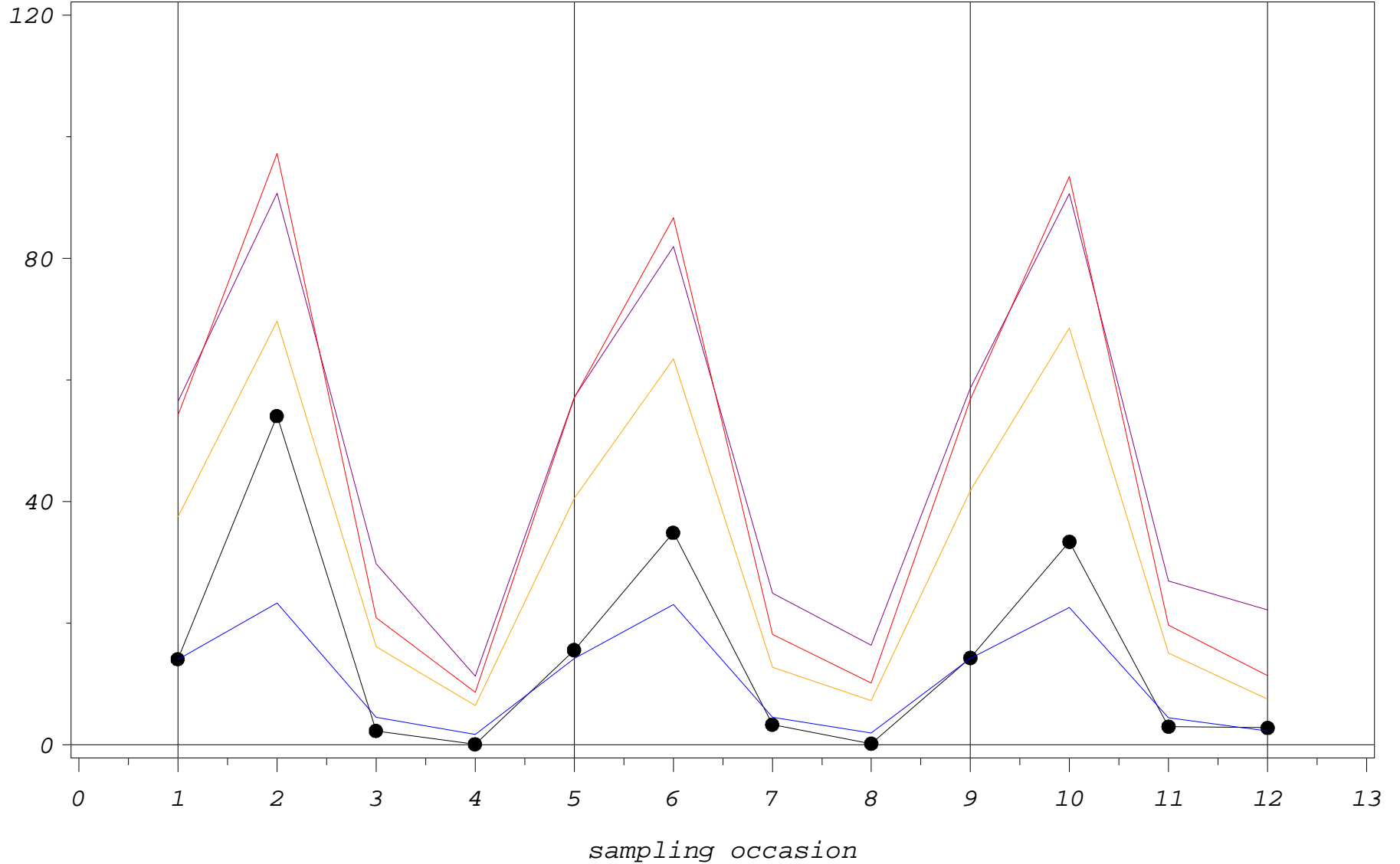
CODE=H02806



Study 2: cortisol single profiles with outlier fences

CODE=H02807

cortisol (nmol/l)

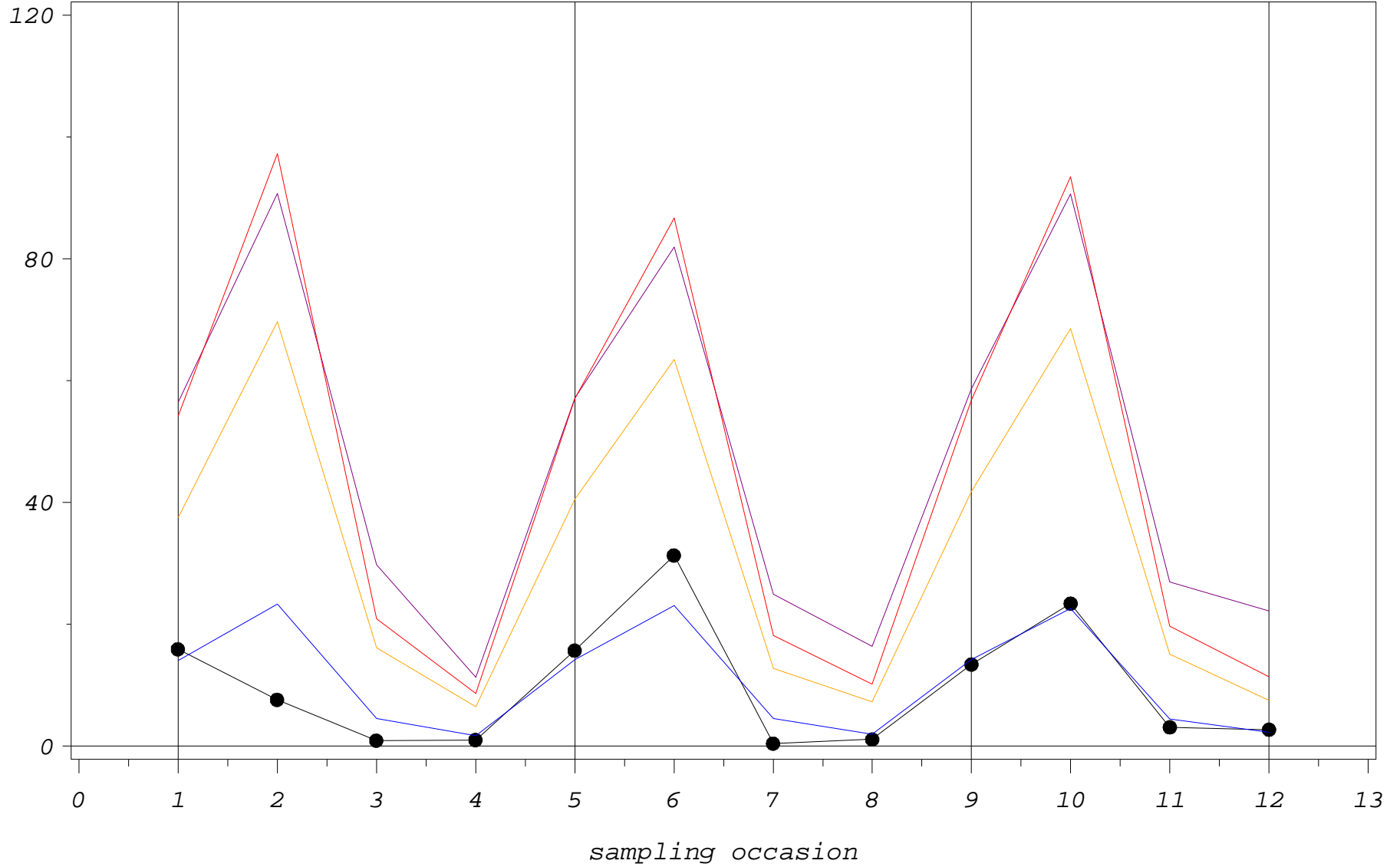


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02808

cortisol (nmol/l)



PLOT

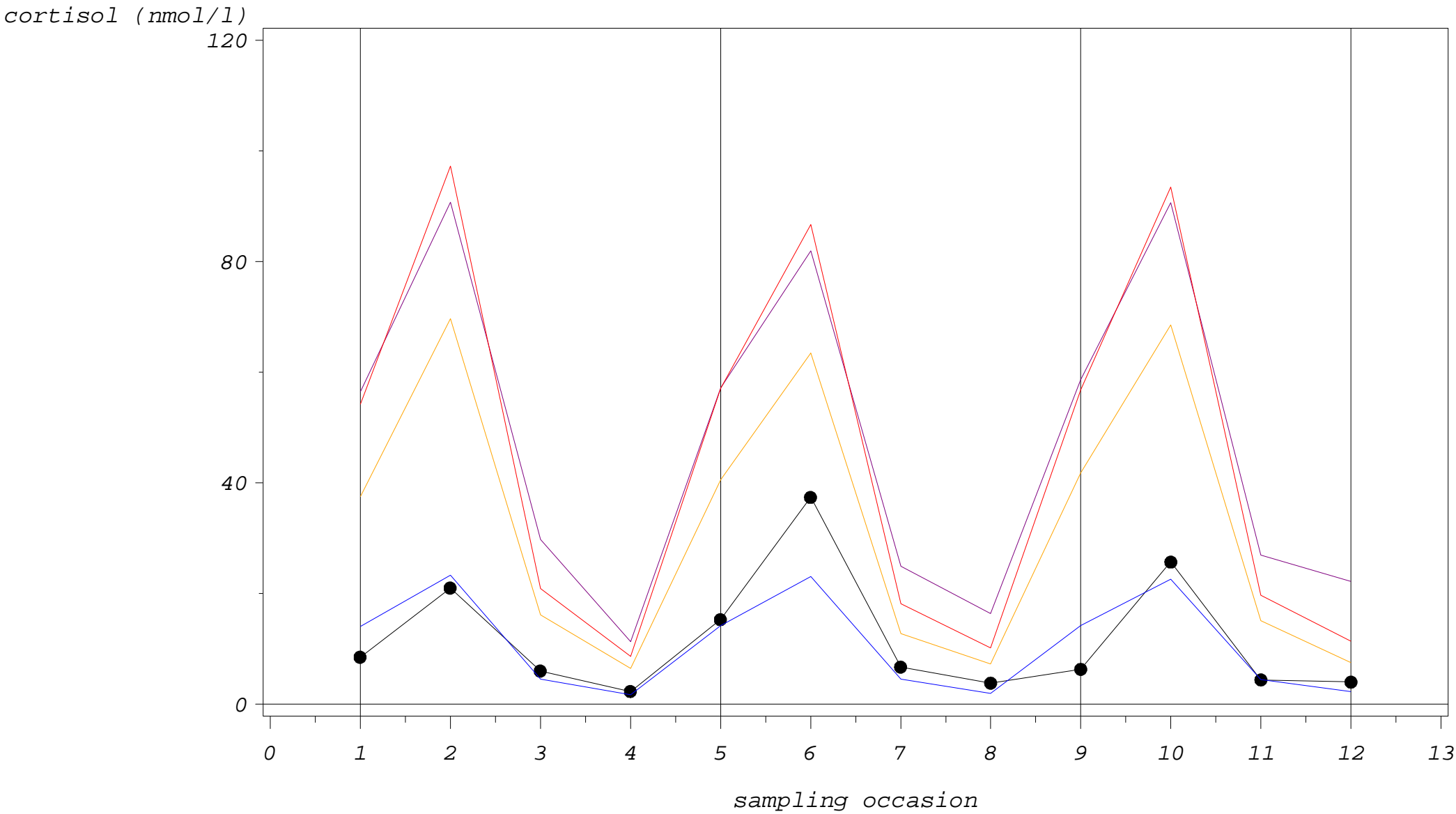
●—●—● Cortisol
— Q3+(3*IQR)

— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

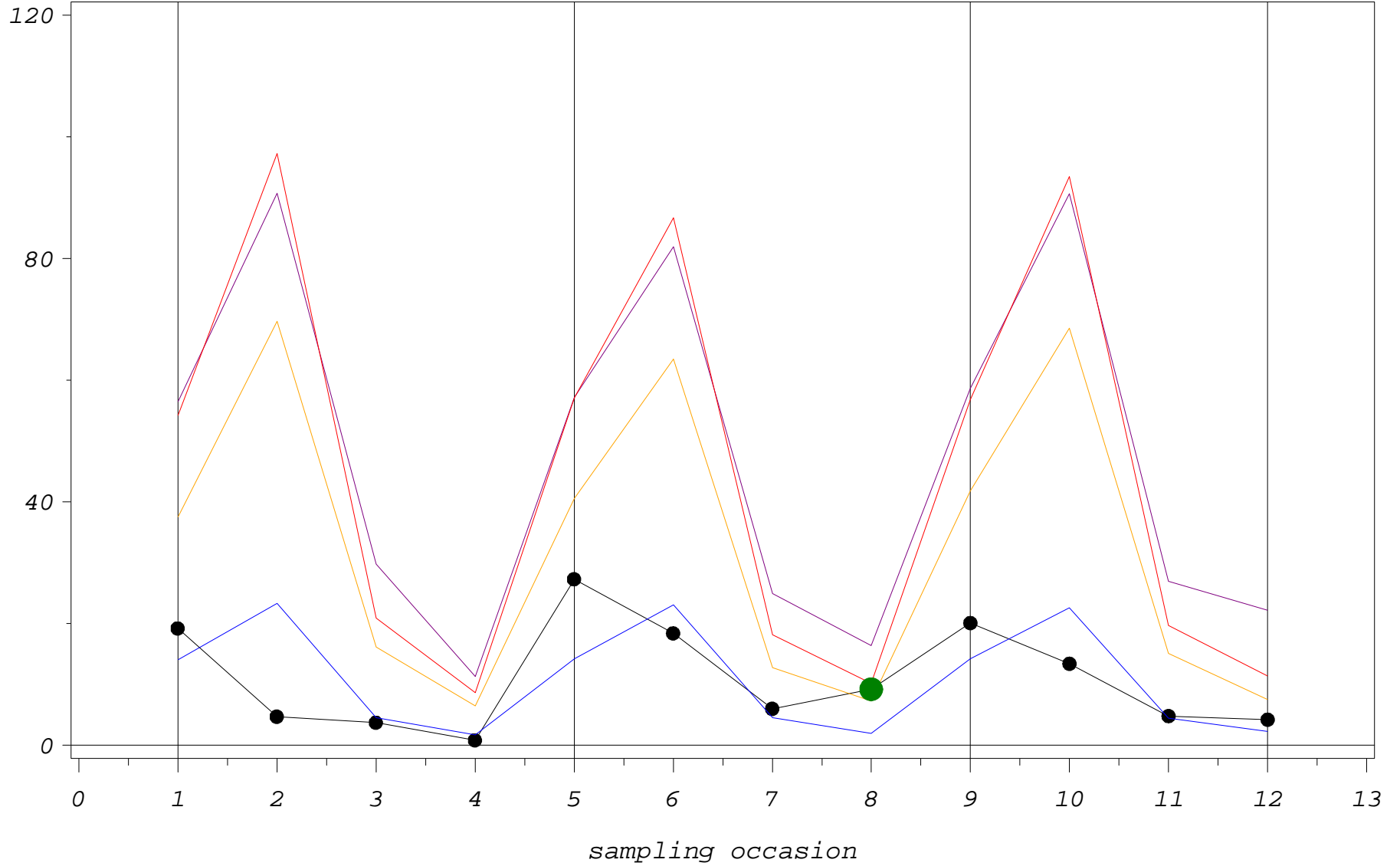
CODE=H02809



Study 2: cortisol single profiles with outlier fences

CODE=H02810

cortisol (nmol/l)

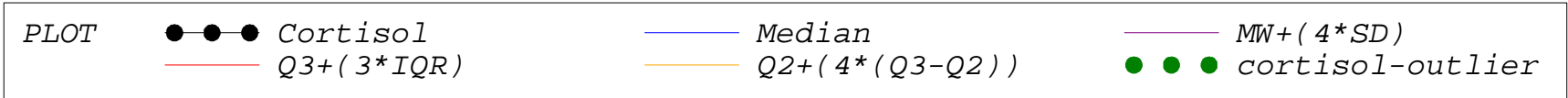
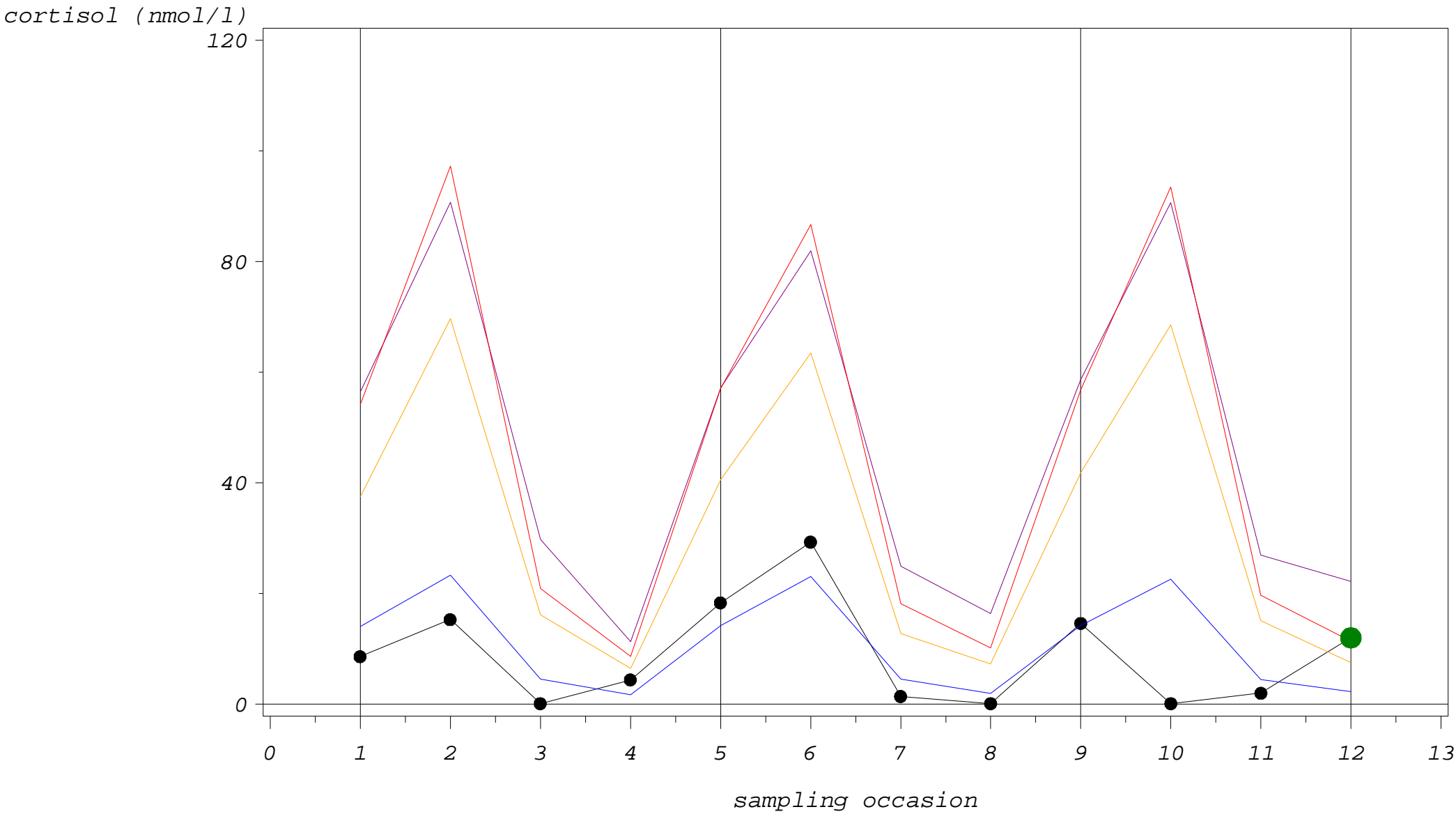


PLOT

●—●—●	Cortisol	—	Median	—	$MW + (4 \cdot SD)$
—	$Q3 + (3 \cdot IQR)$	—	$Q2 + (4 \cdot (Q3 - Q2))$	●—●—●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

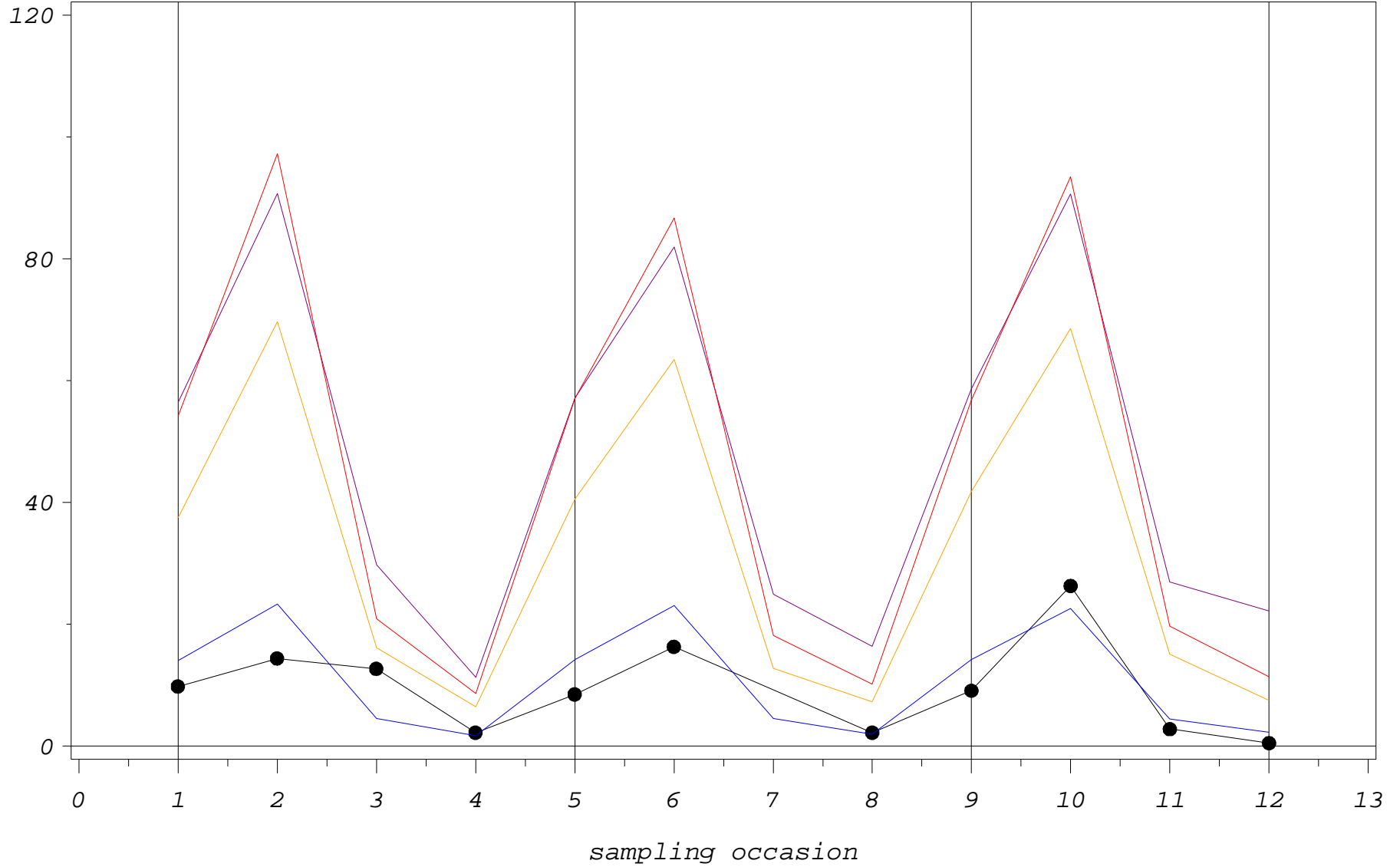
CODE=H02811



Study 2: cortisol single profiles with outlier fences

CODE=H02812

cortisol (nmol/l)



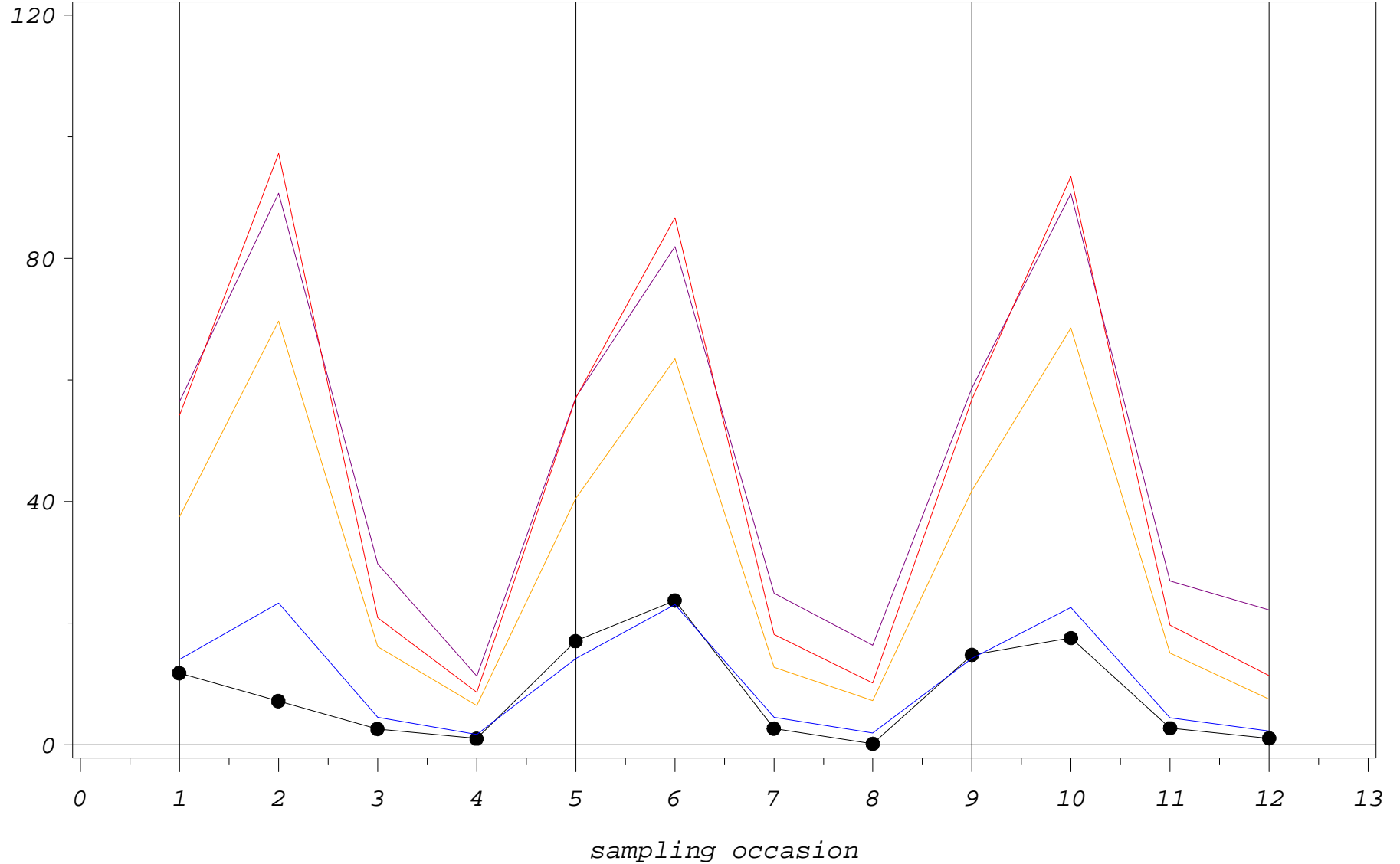
PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02901

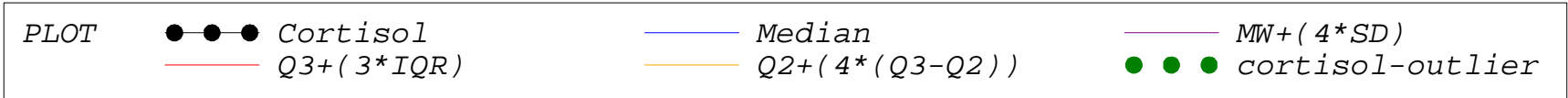
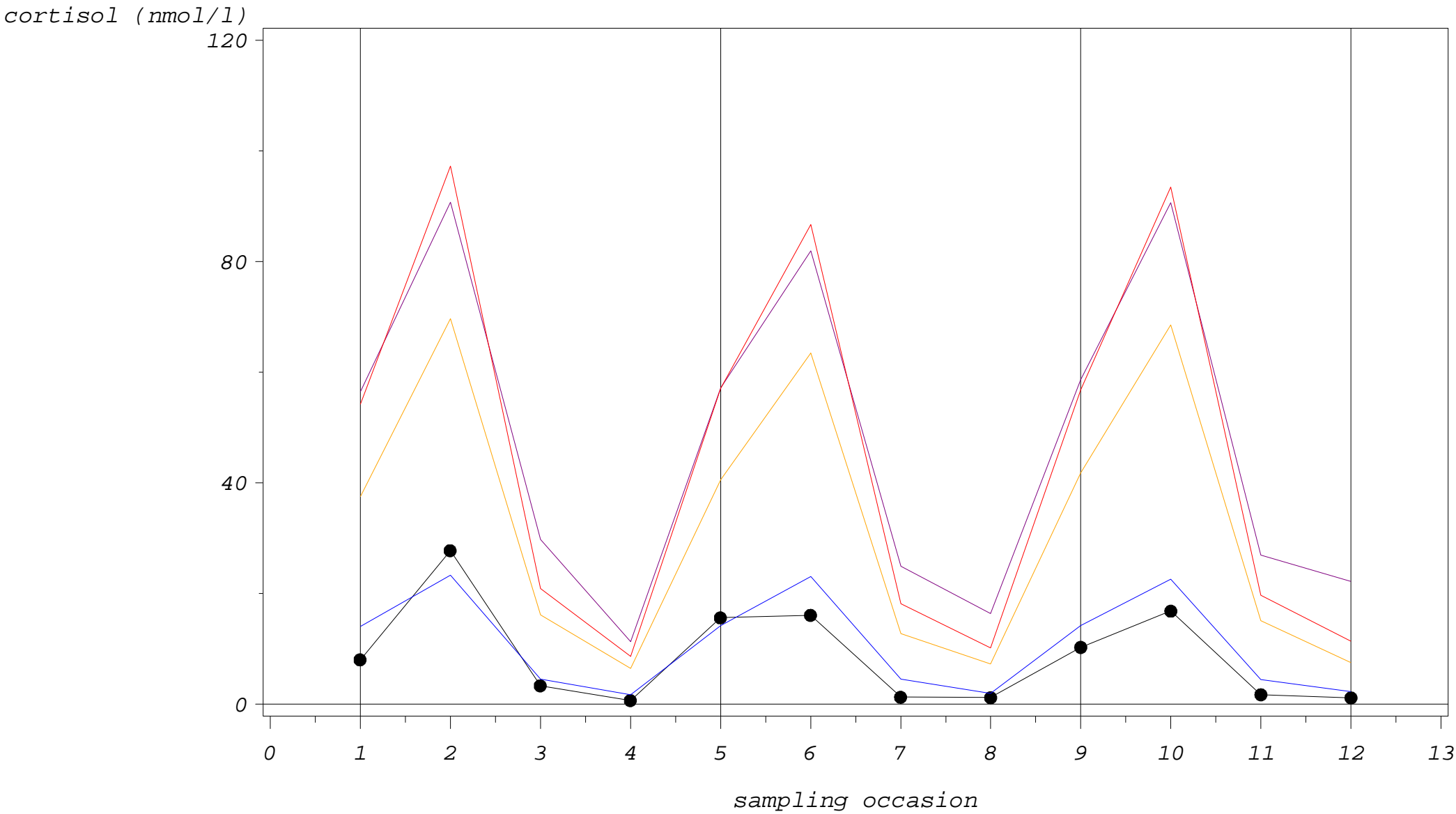
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 \times SD)$
 — $Q3 + (3 \times IQR)$ — $Q2 + (4 \times (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

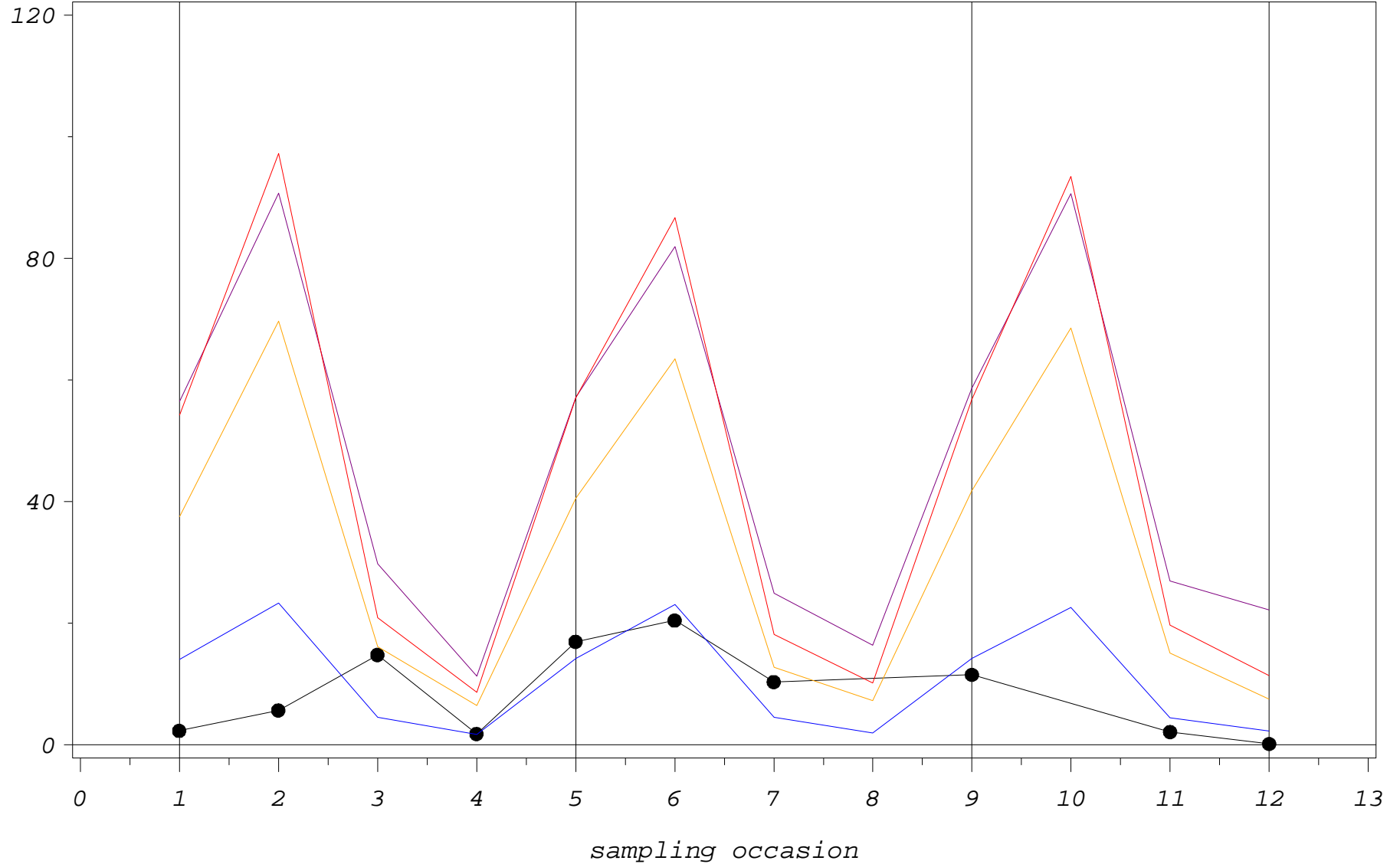
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Study 2: cortisol single profiles with outlier fences

CODE=H02903

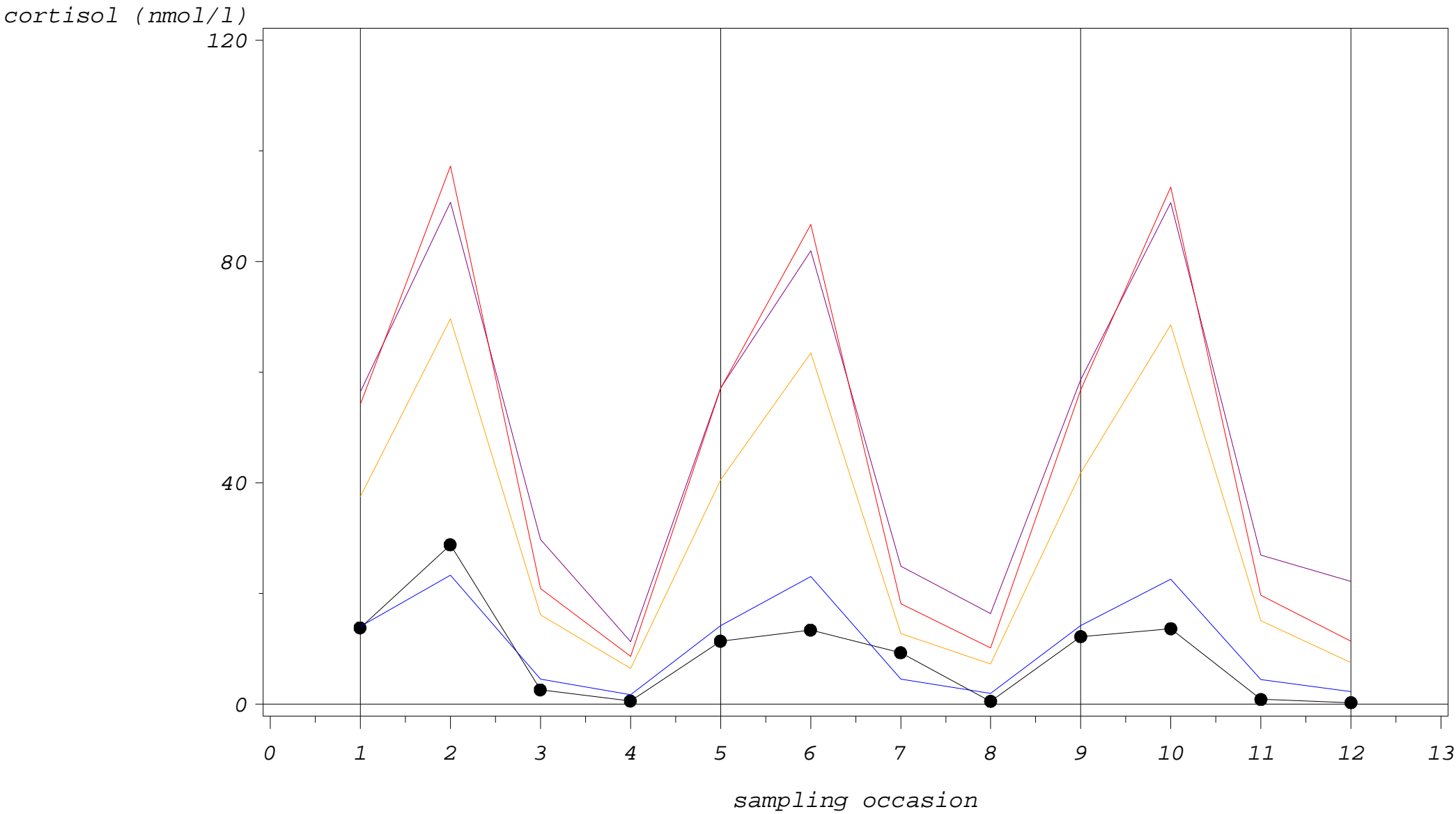
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

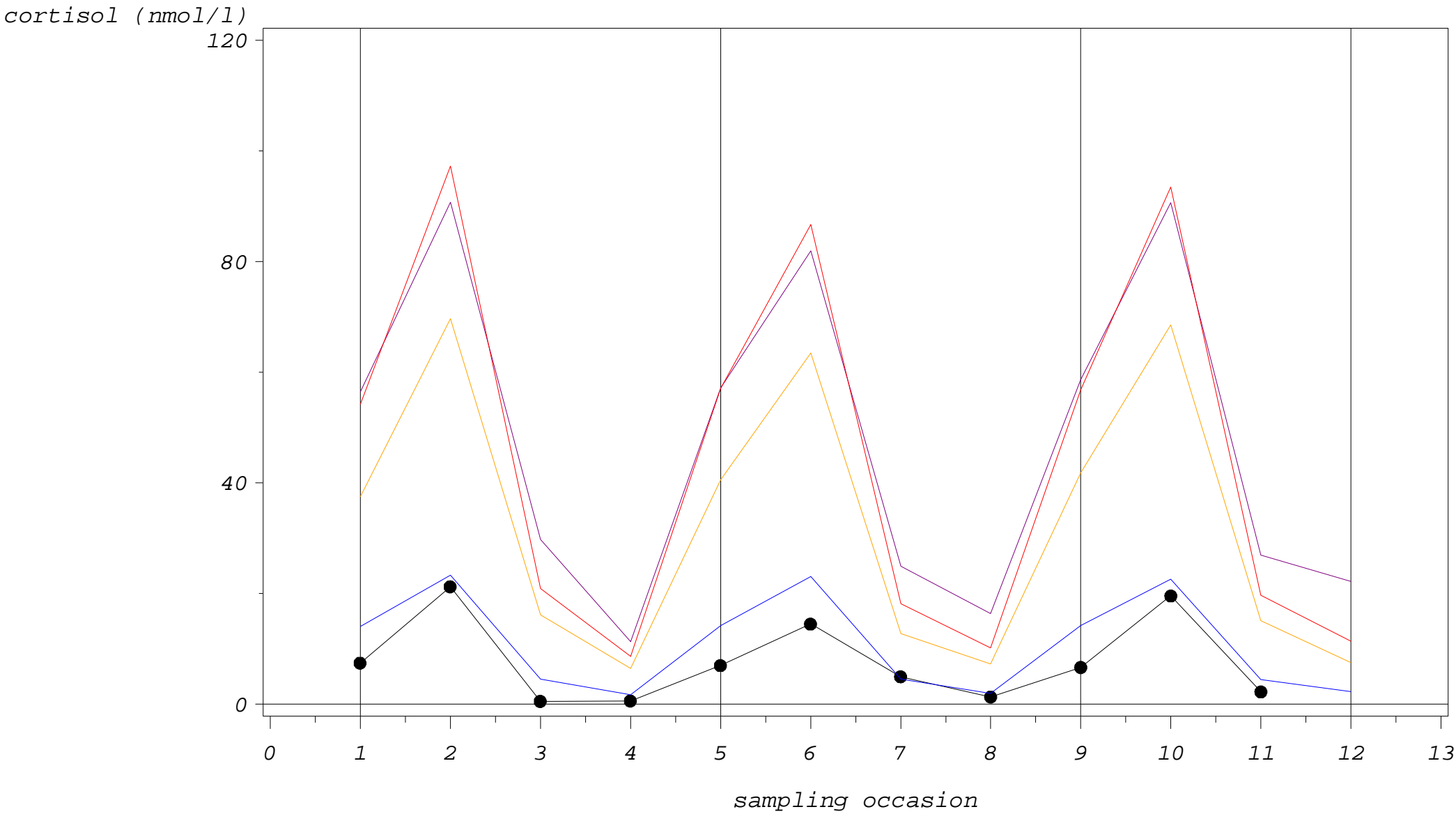
Study 2: cortisol single profiles with outlier fences

CODE=H02904



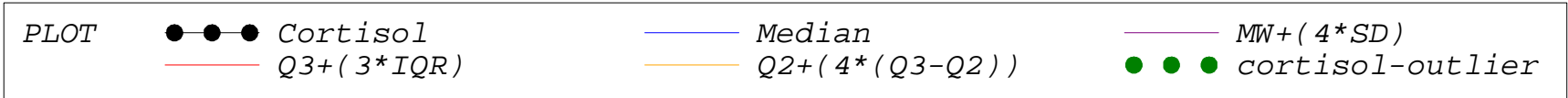
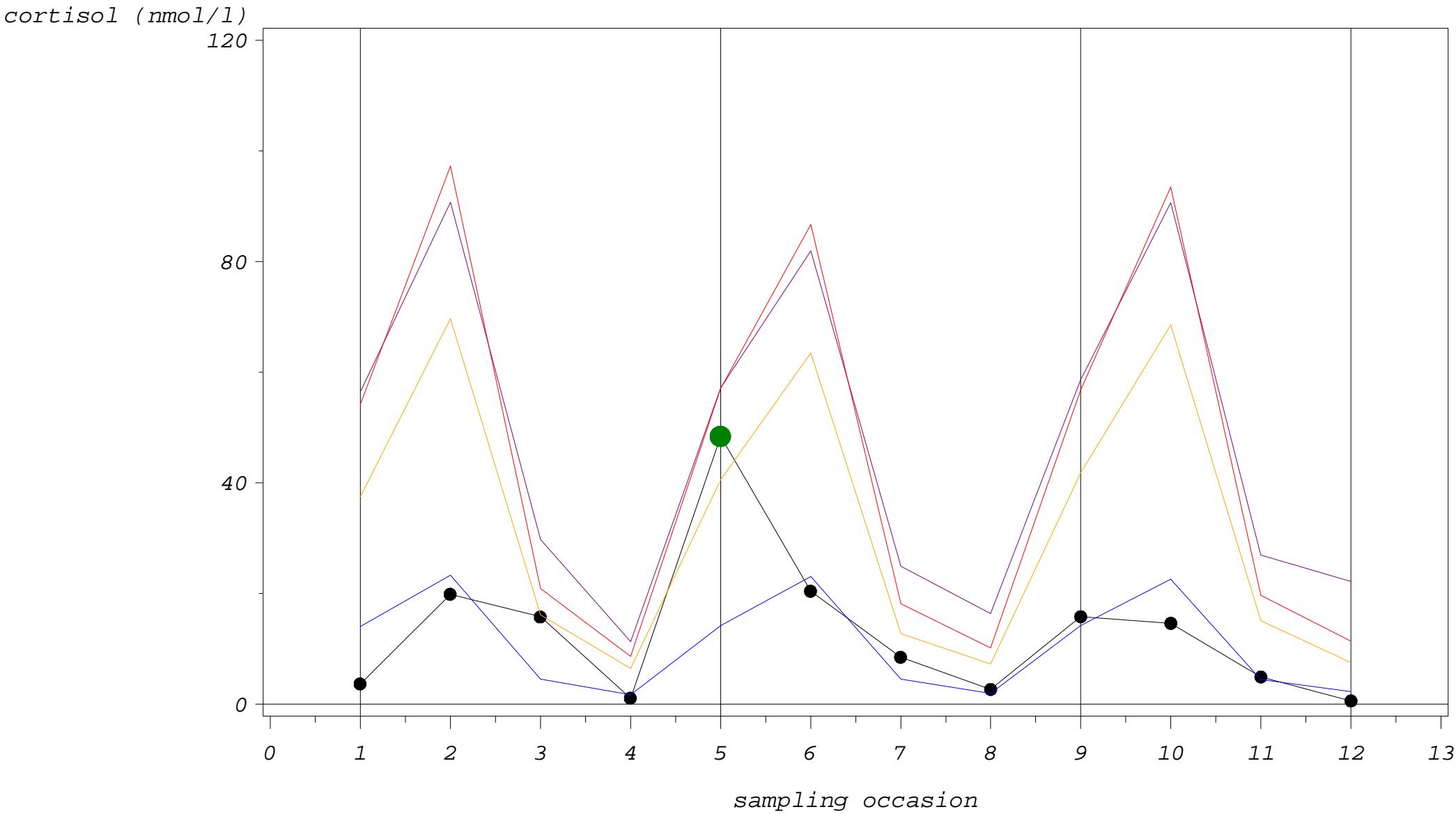
Study 2: cortisol single profiles with outlier fences

CODE=H02905



Study 2: cortisol single profiles with outlier fences

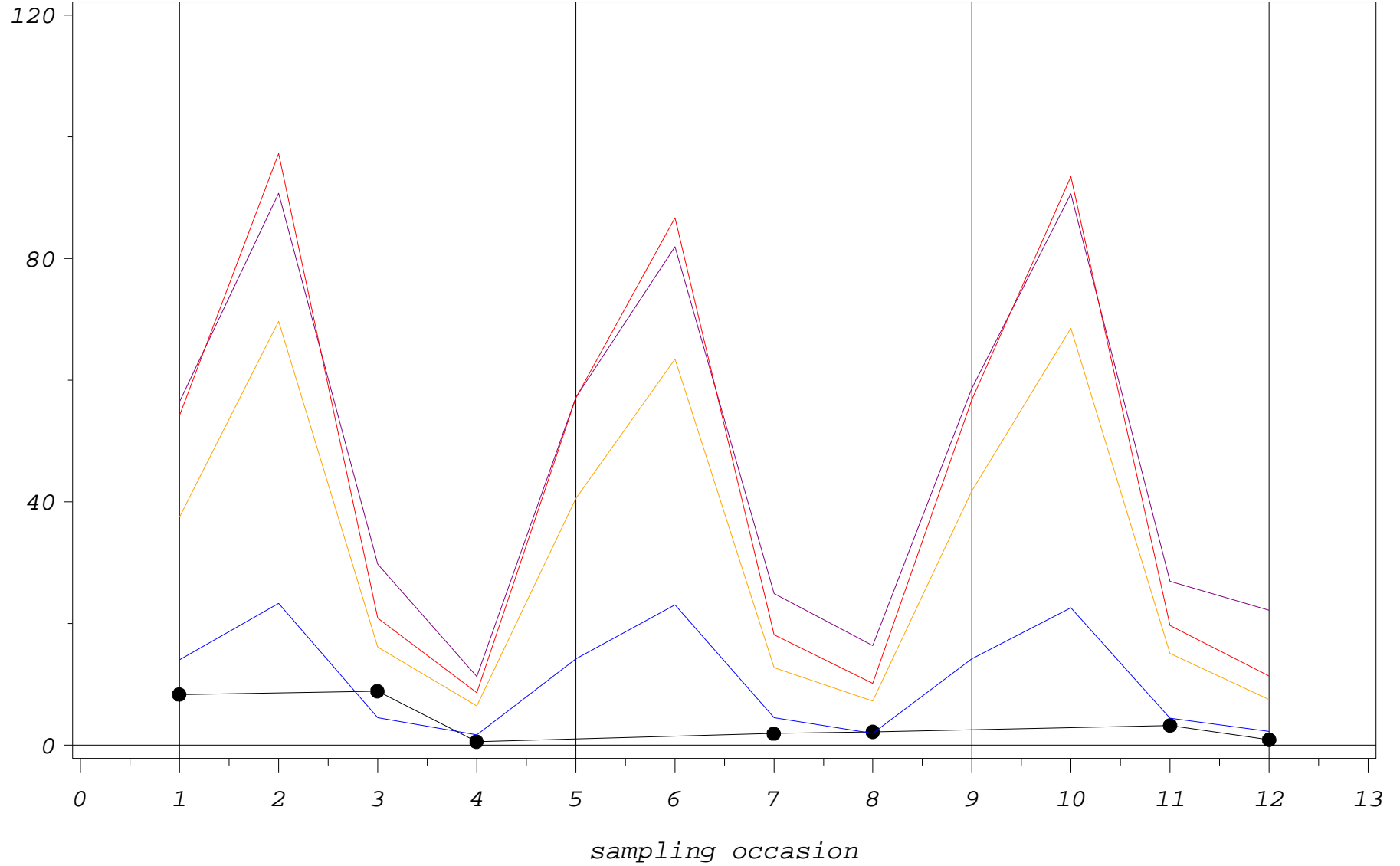
CODE=H02906



Study 2: cortisol single profiles with outlier fences

CODE=H02907

cortisol (nmol/l)

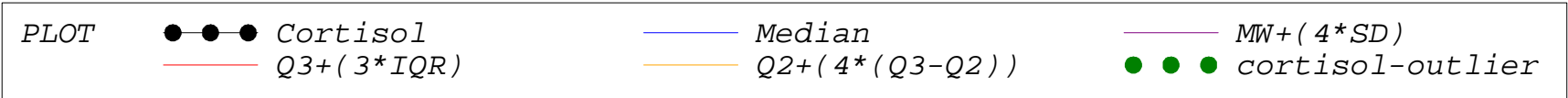
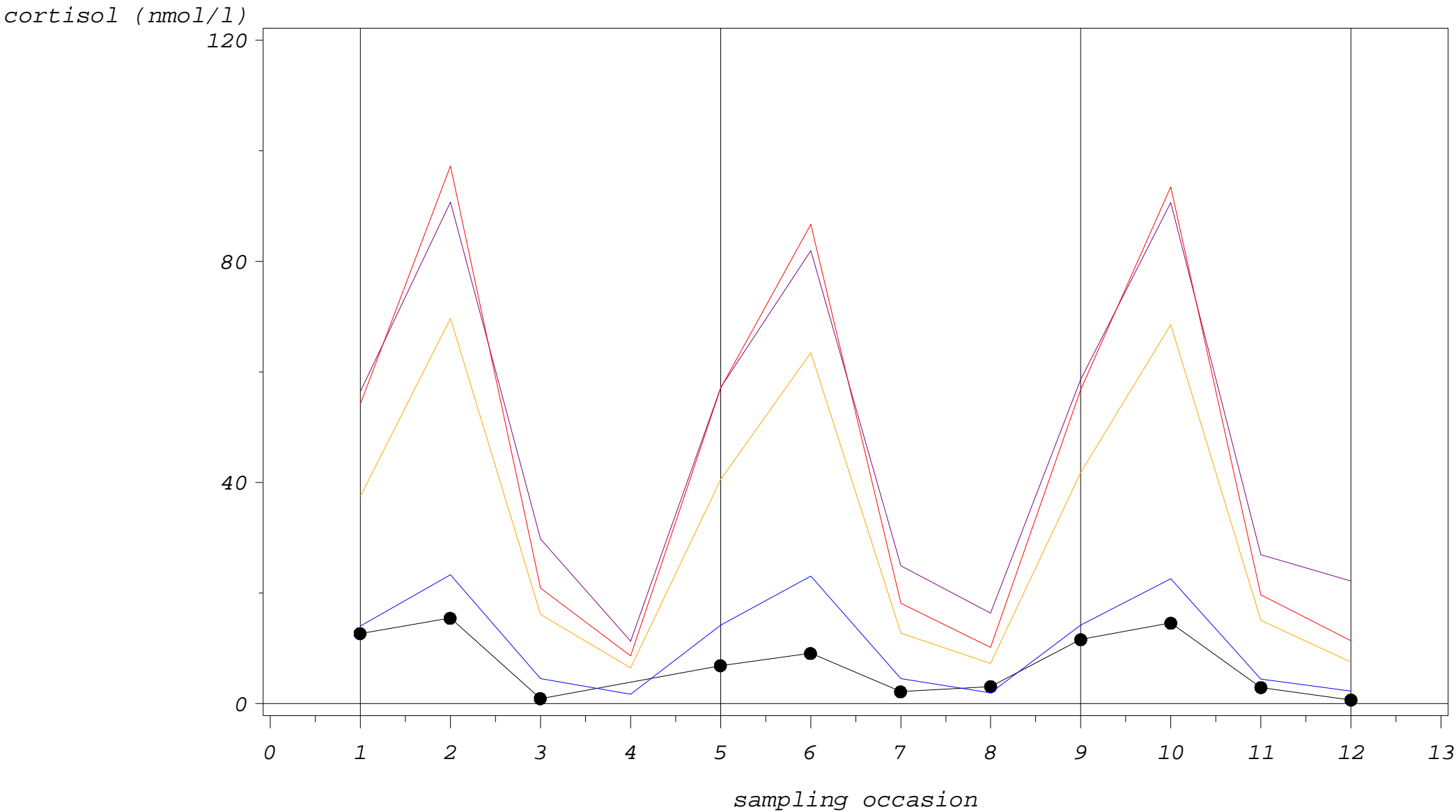


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

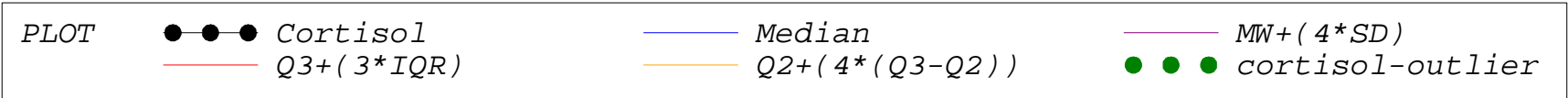
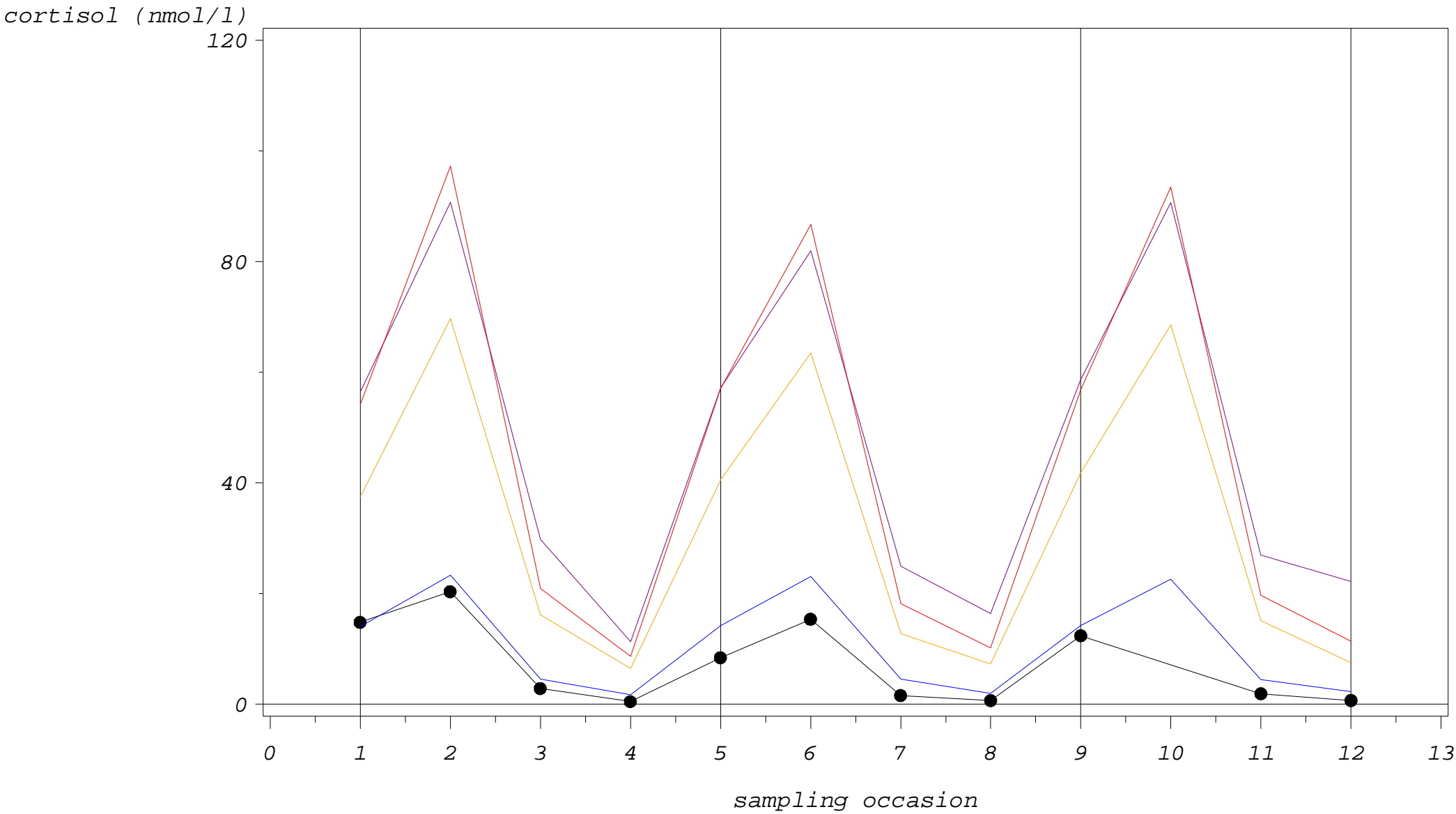
Study 2: cortisol single profiles with outlier fences

CODE=H02908



Study 2: cortisol single profiles with outlier fences

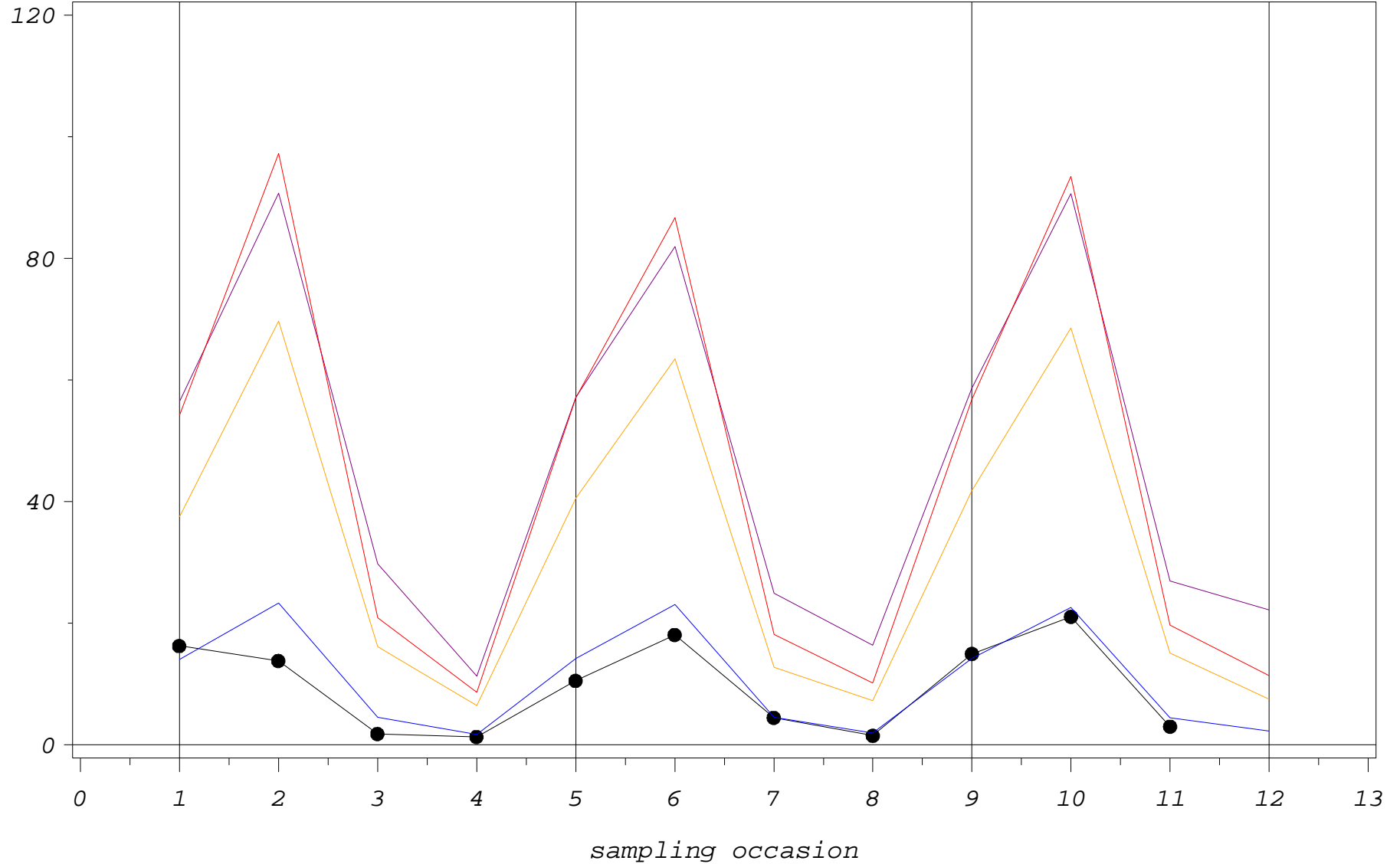
CODE=H02909



Study 2: cortisol single profiles with outlier fences

CODE=H02910

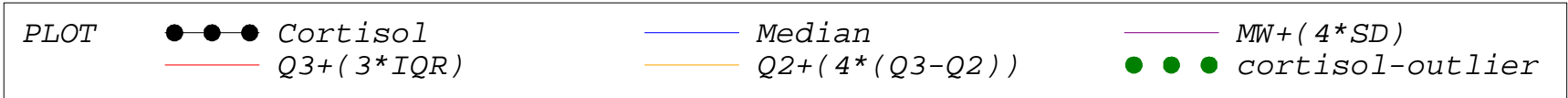
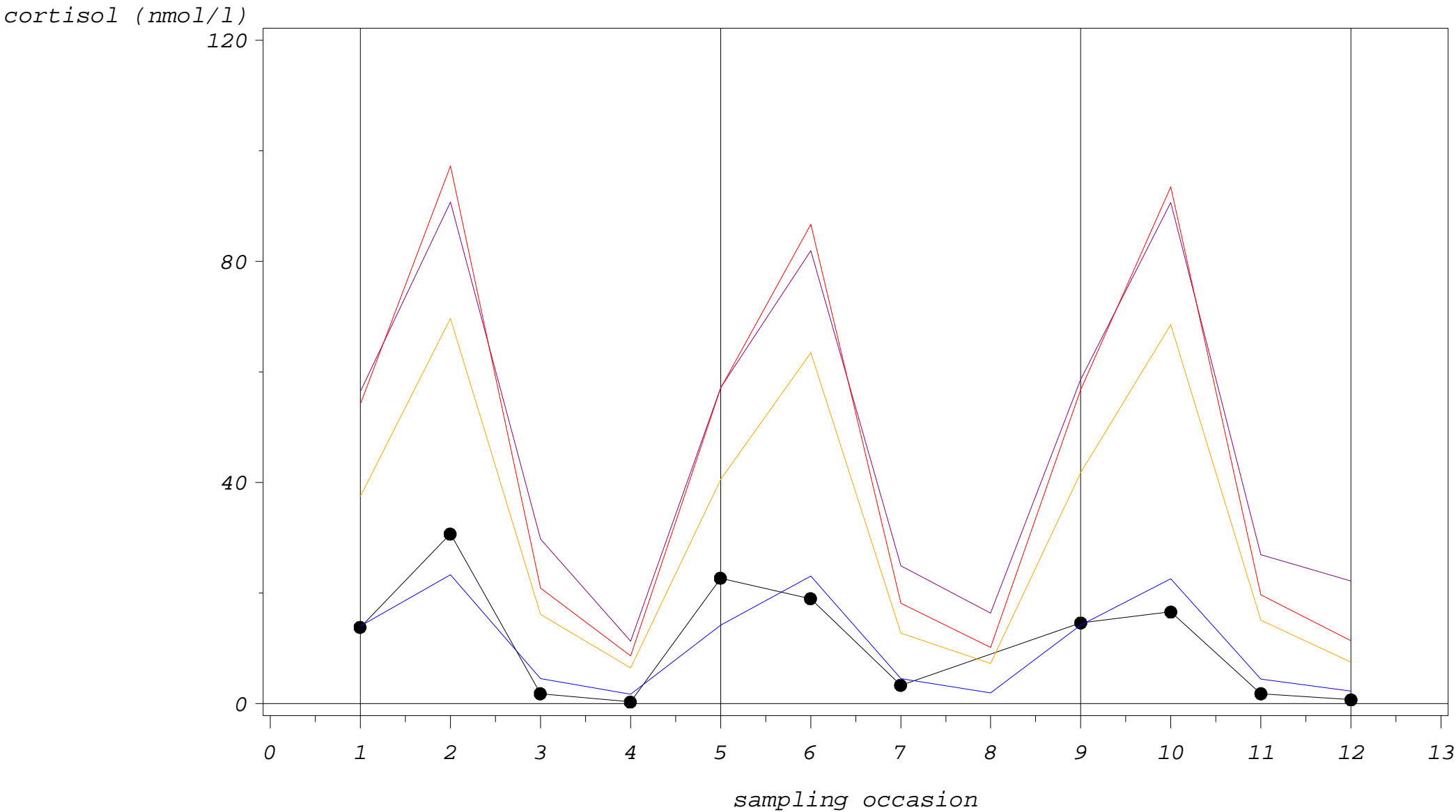
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

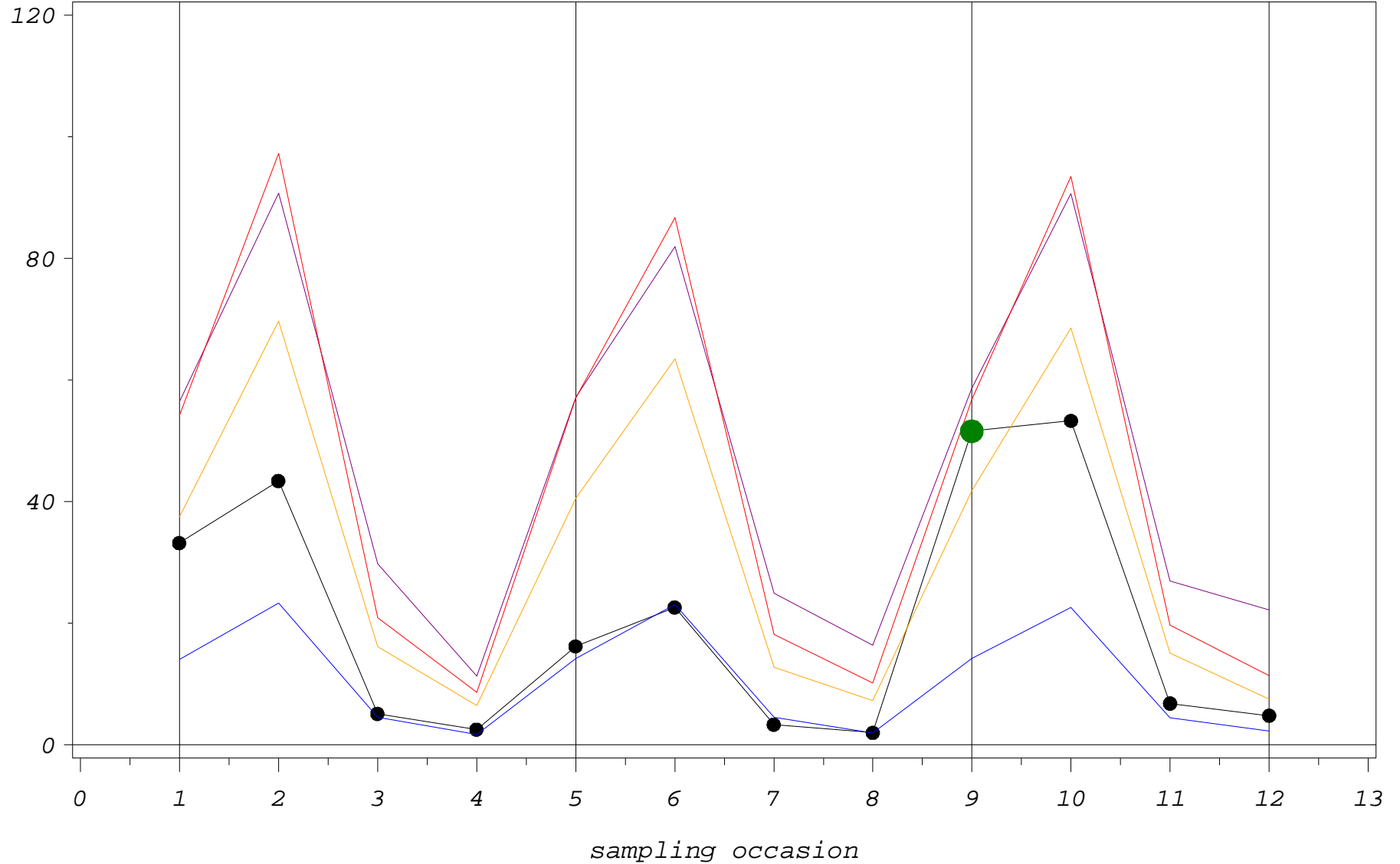
CODE=H02911



Study 2: cortisol single profiles with outlier fences

CODE=H02912

cortisol (nmol/l)

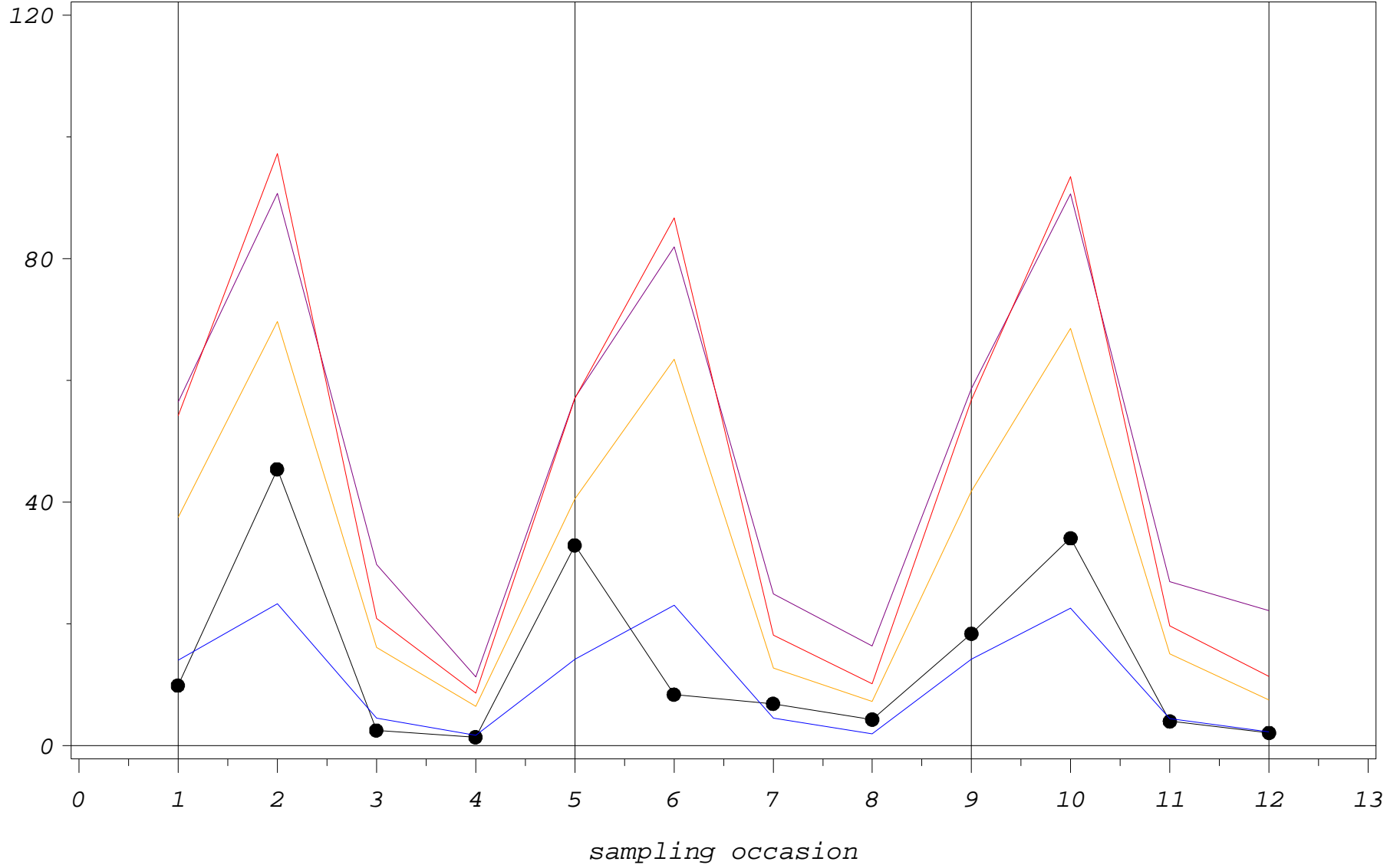


PLOT ●—●—● Cortisol — Median — $MW + (4 * SD)$
 — $Q3 + (3 * IQR)$ — $Q2 + (4 * (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H02913

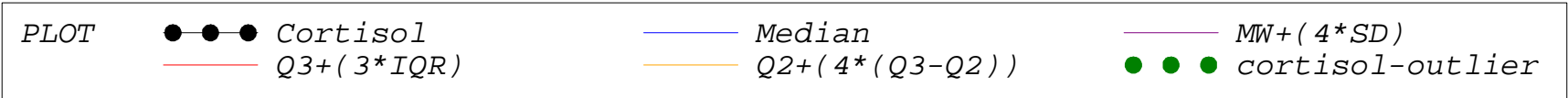
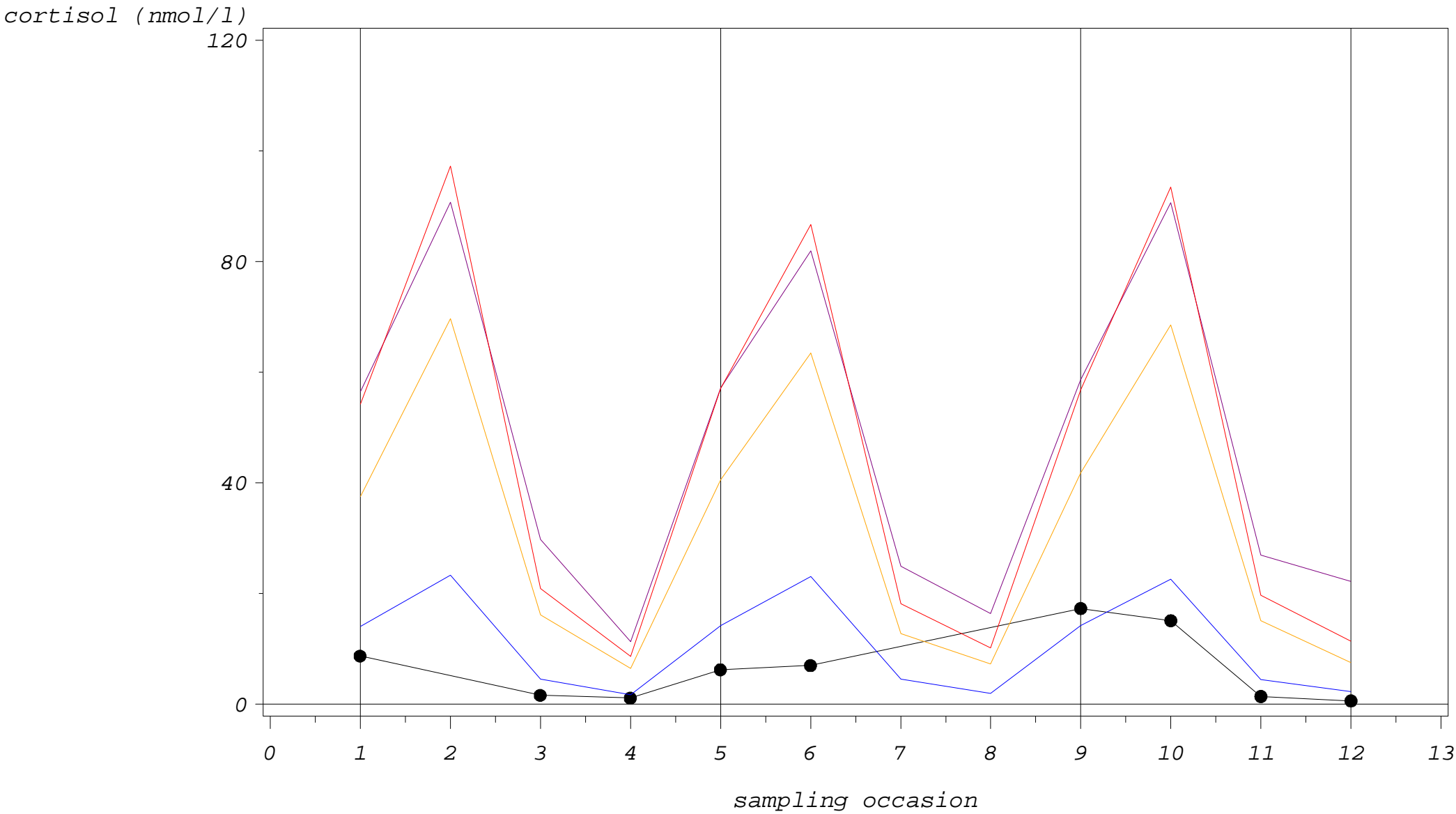
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

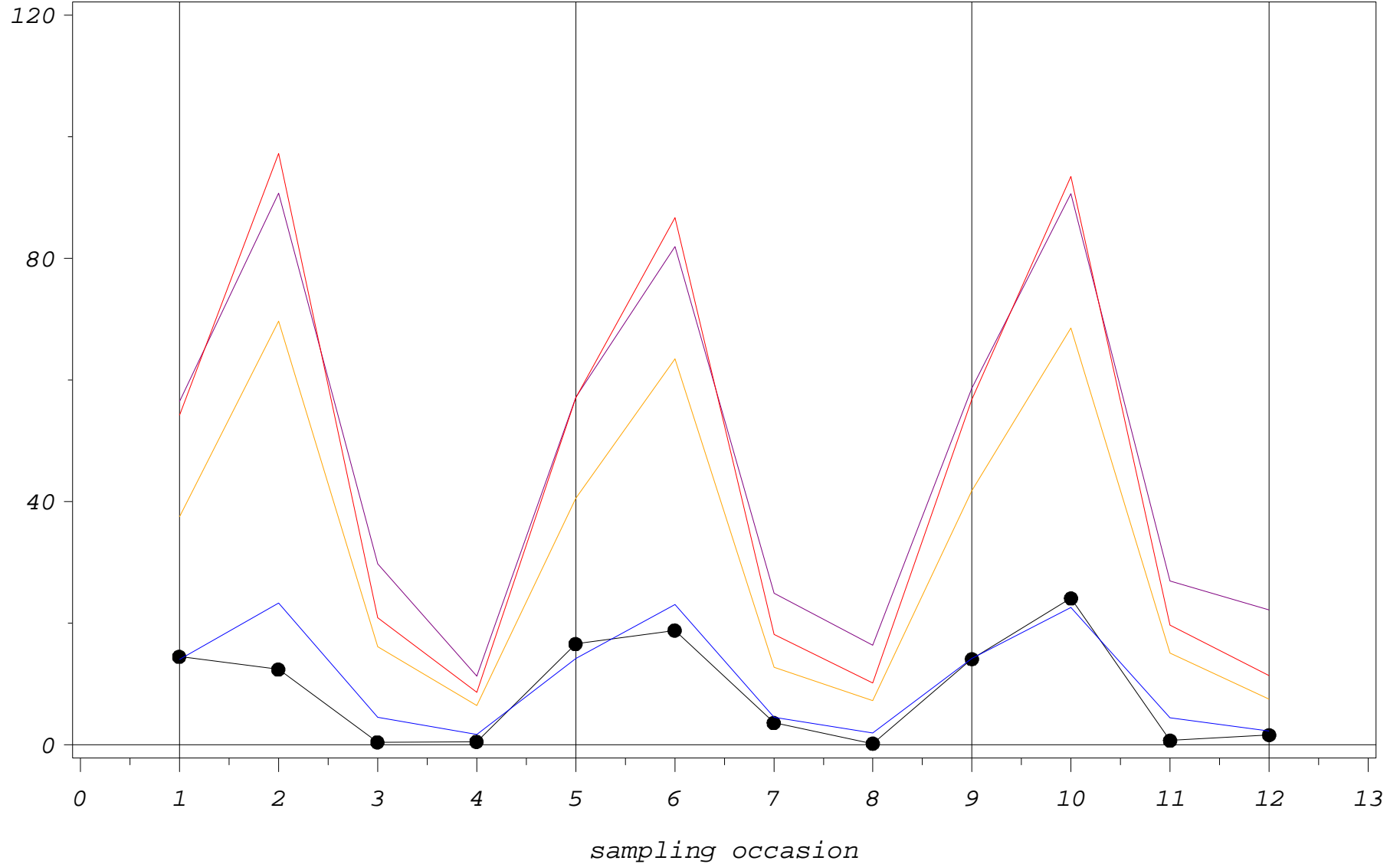
CODE=H02914



Study 2: cortisol single profiles with outlier fences

CODE=H02915

cortisol (nmol/l)

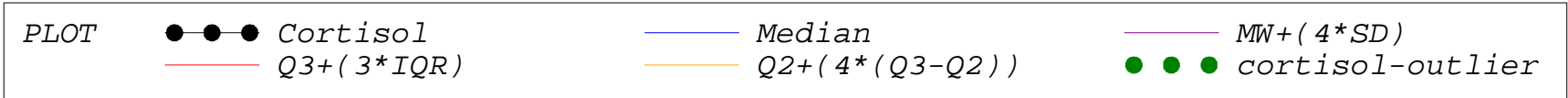
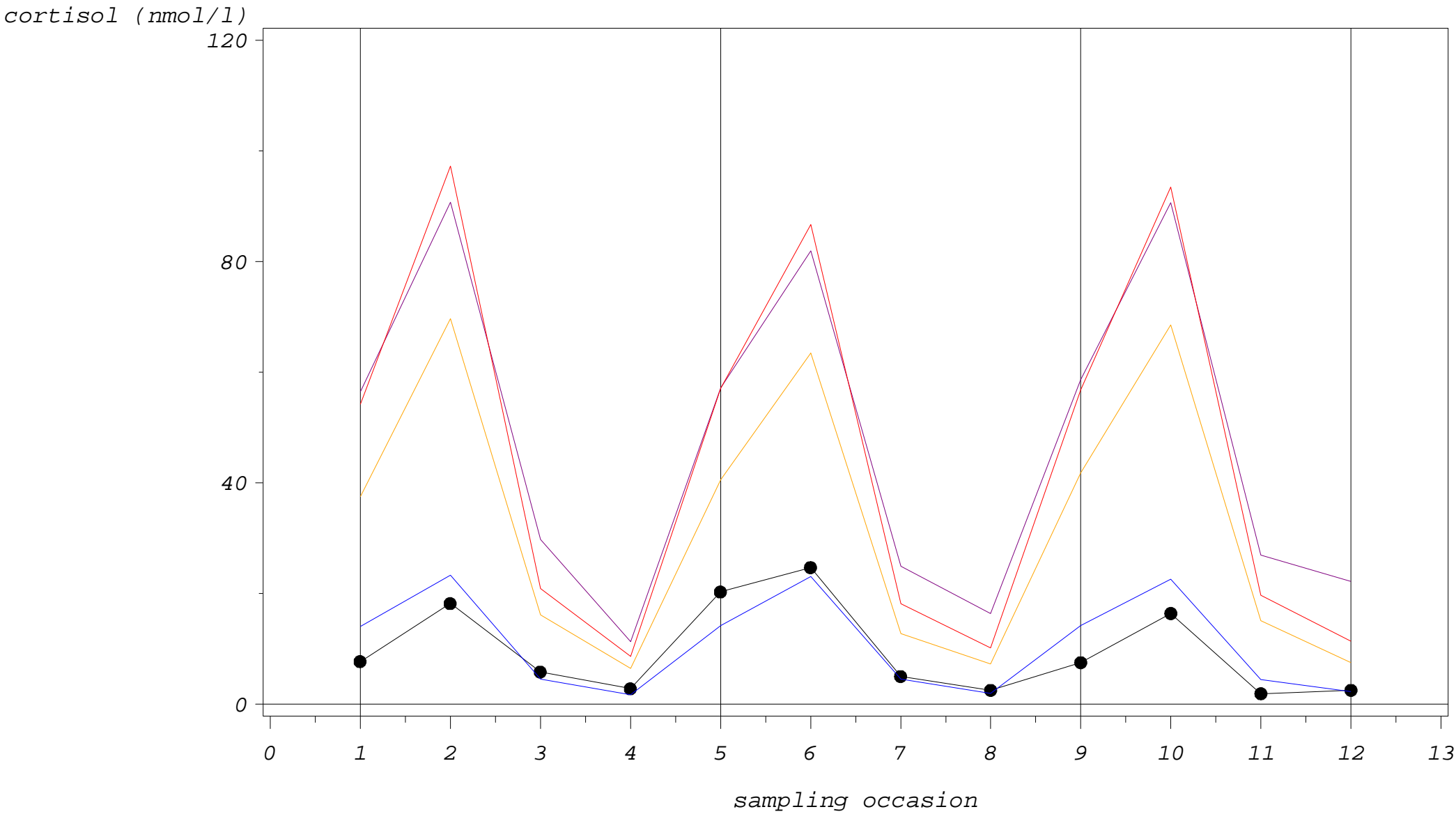


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

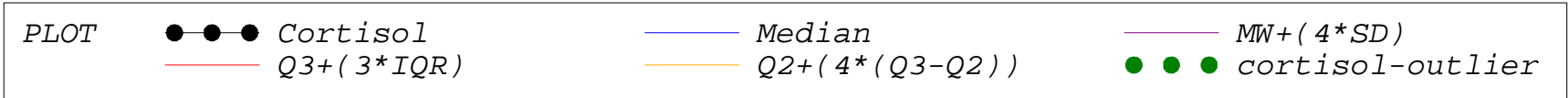
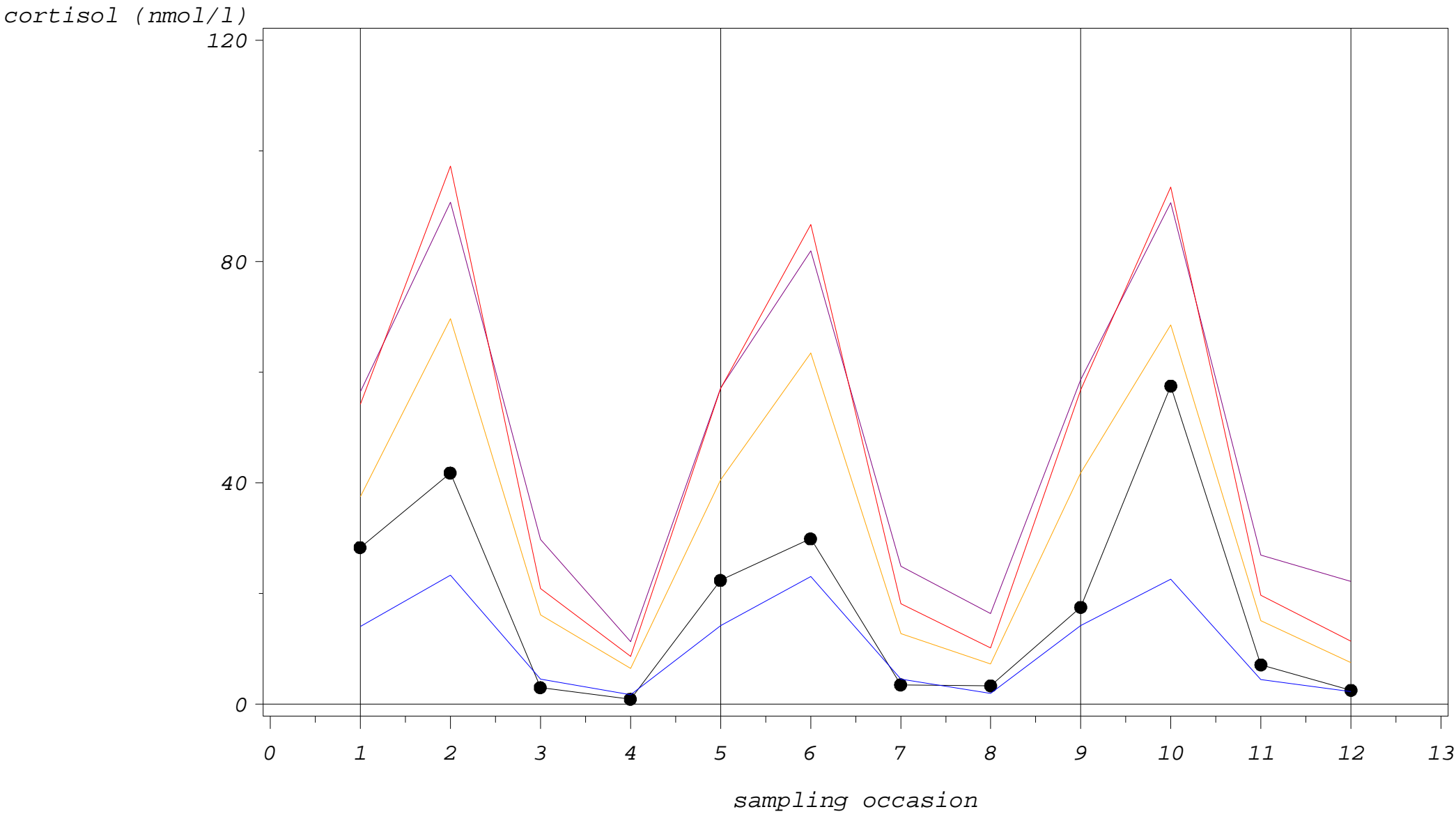
Study 2: cortisol single profiles with outlier fences

CODE=H02916



Study 2: cortisol single profiles with outlier fences

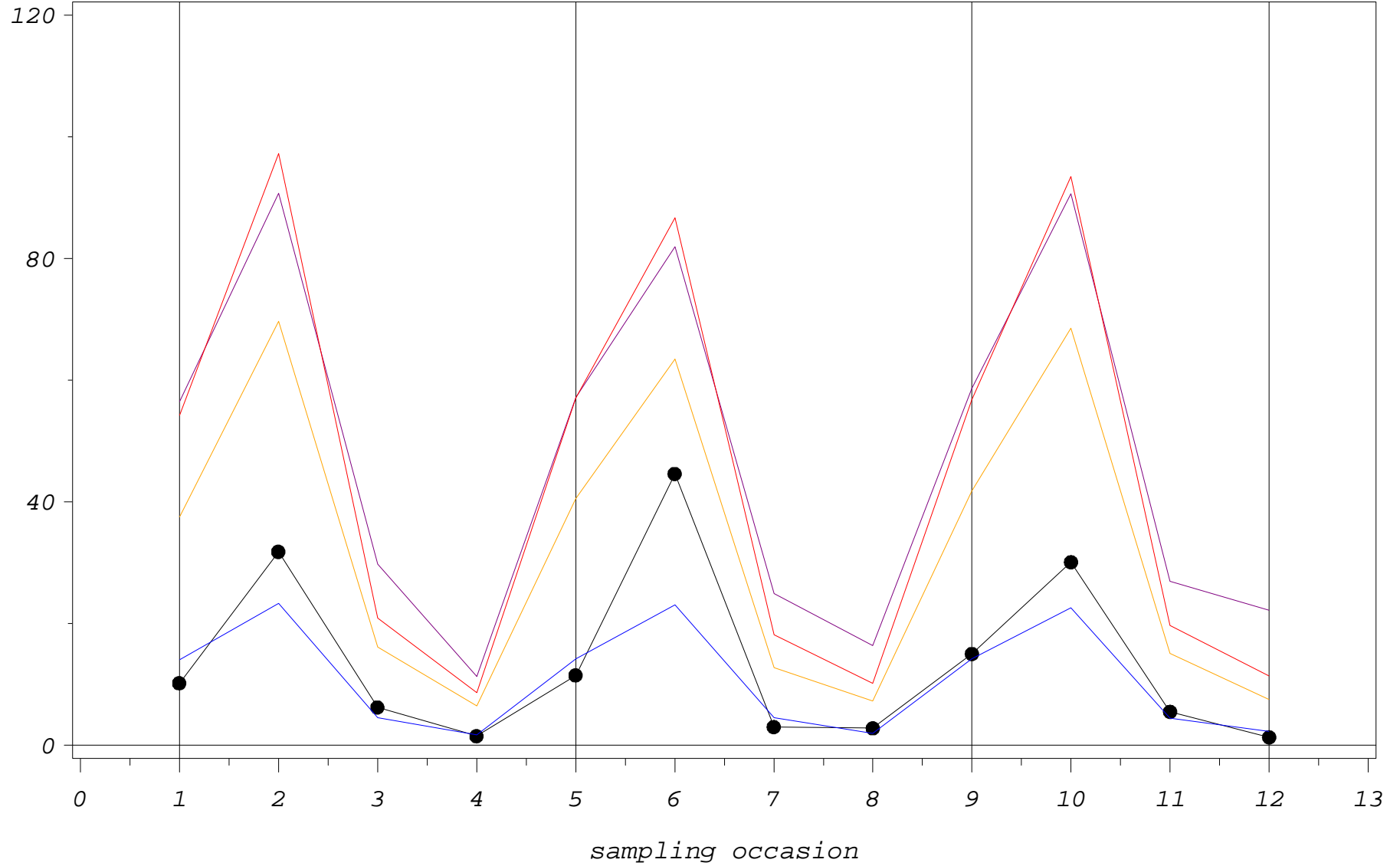
CODE=H02917



Study 2: cortisol single profiles with outlier fences

CODE=H02918

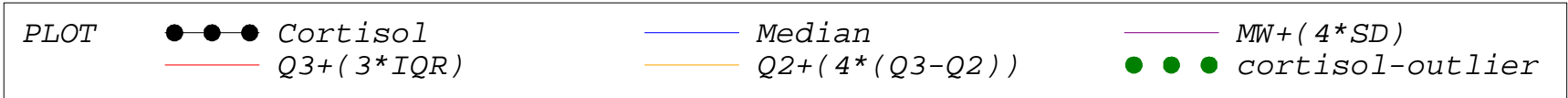
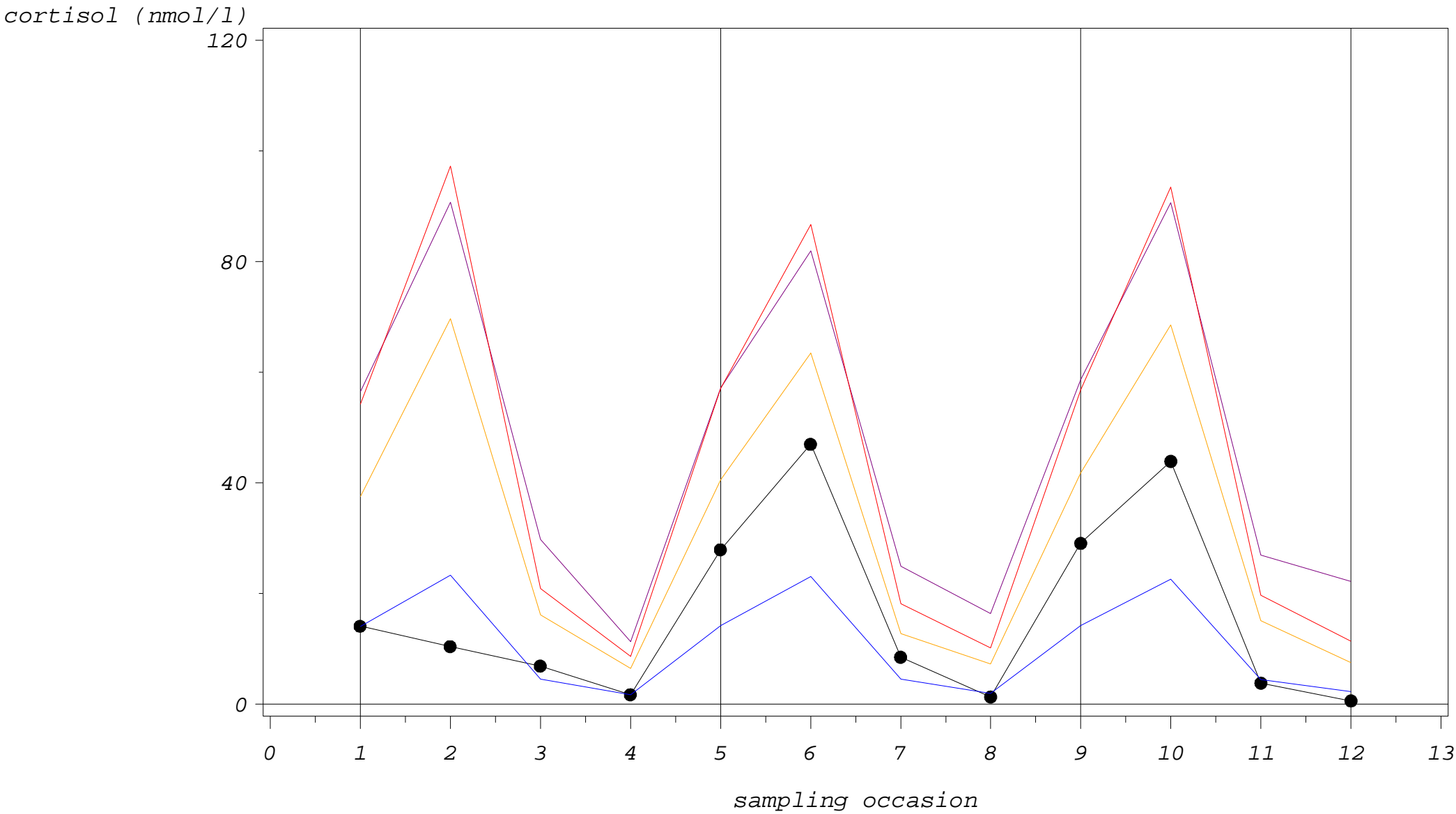
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

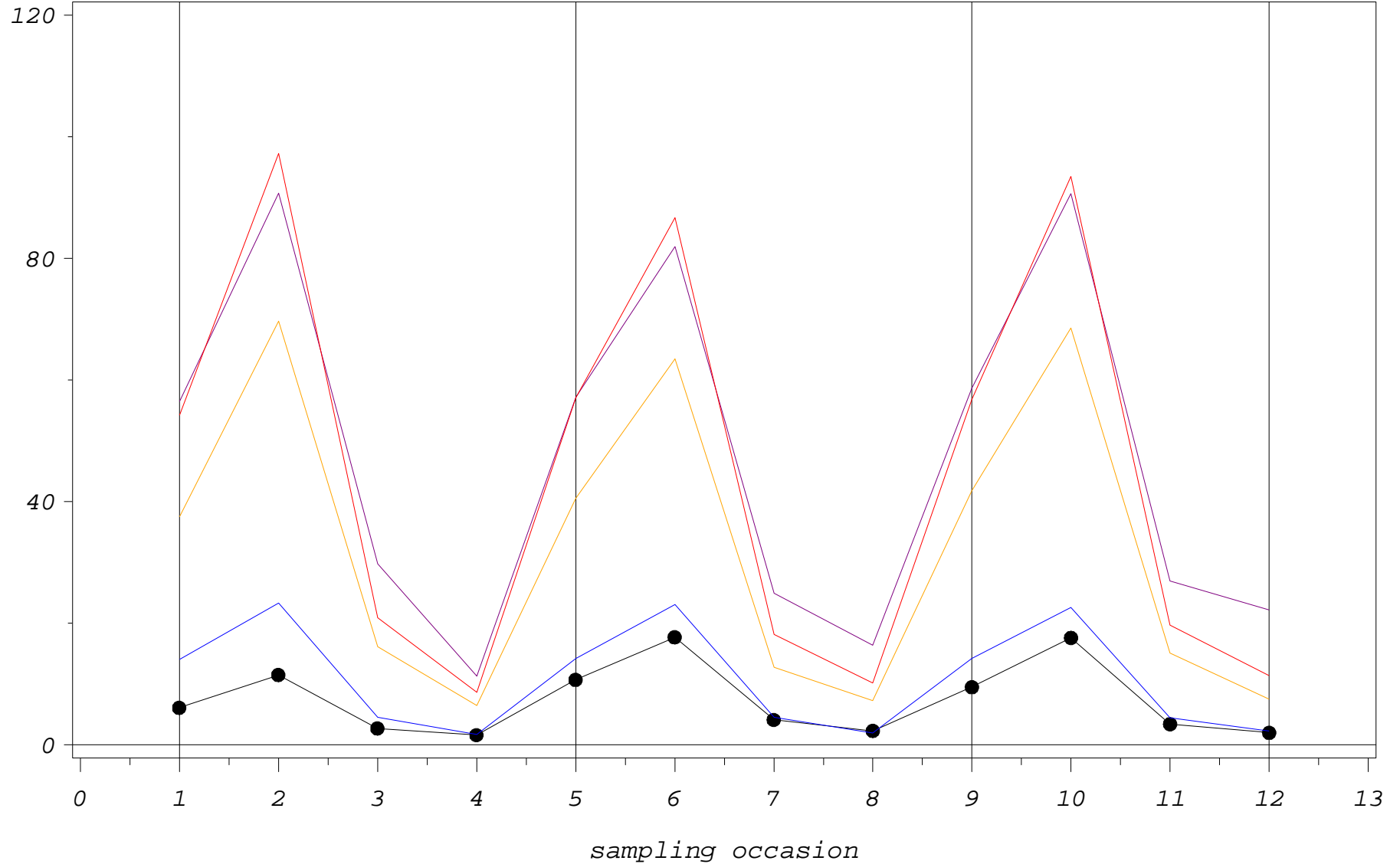
CODE=H03301



Study 2: cortisol single profiles with outlier fences

CODE=H03302

cortisol (nmol/l)

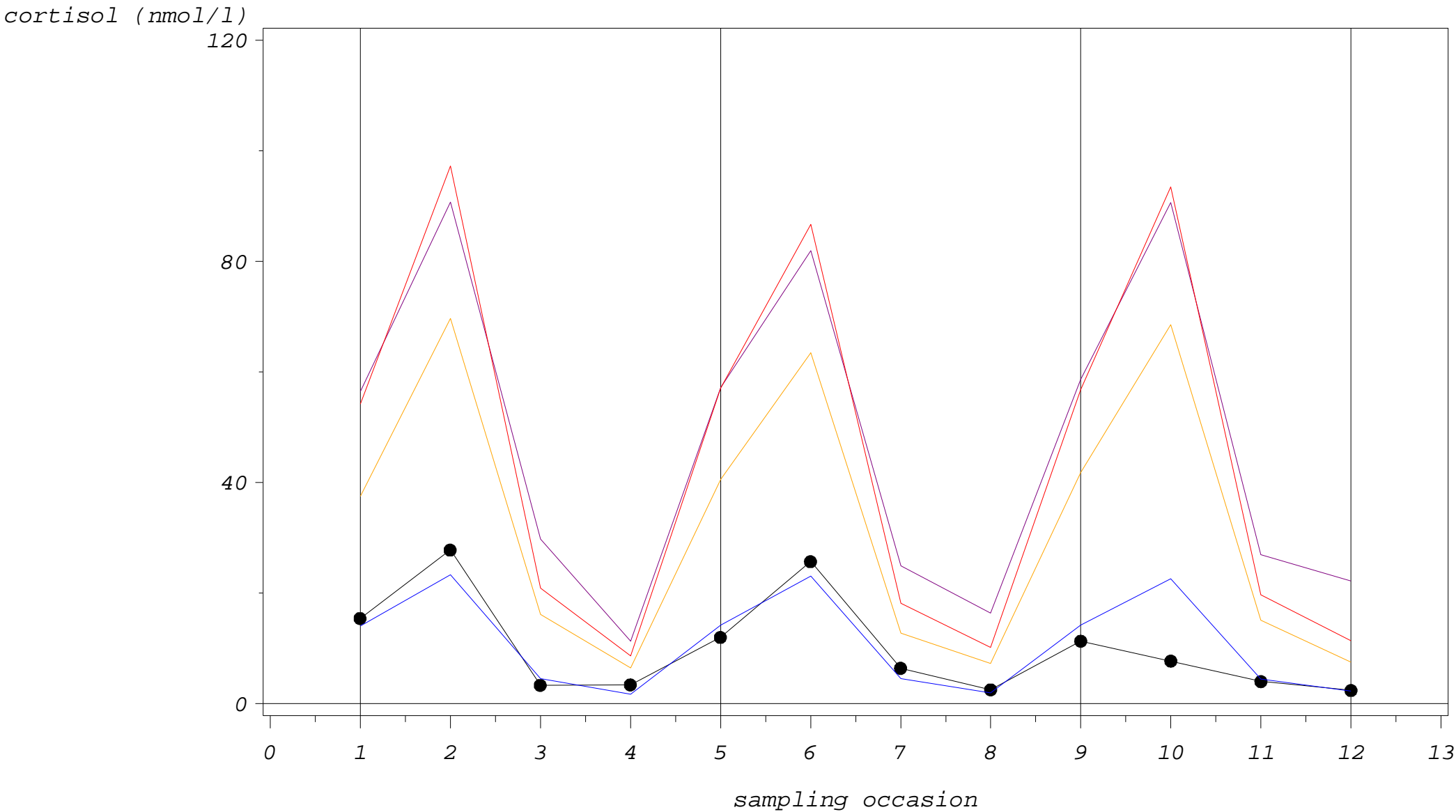


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

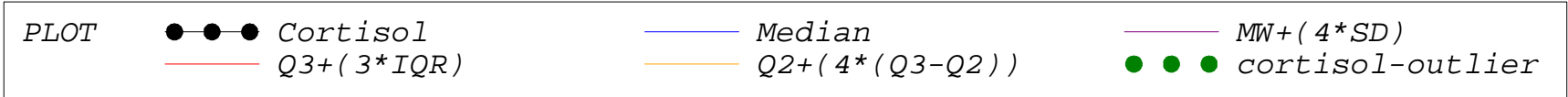
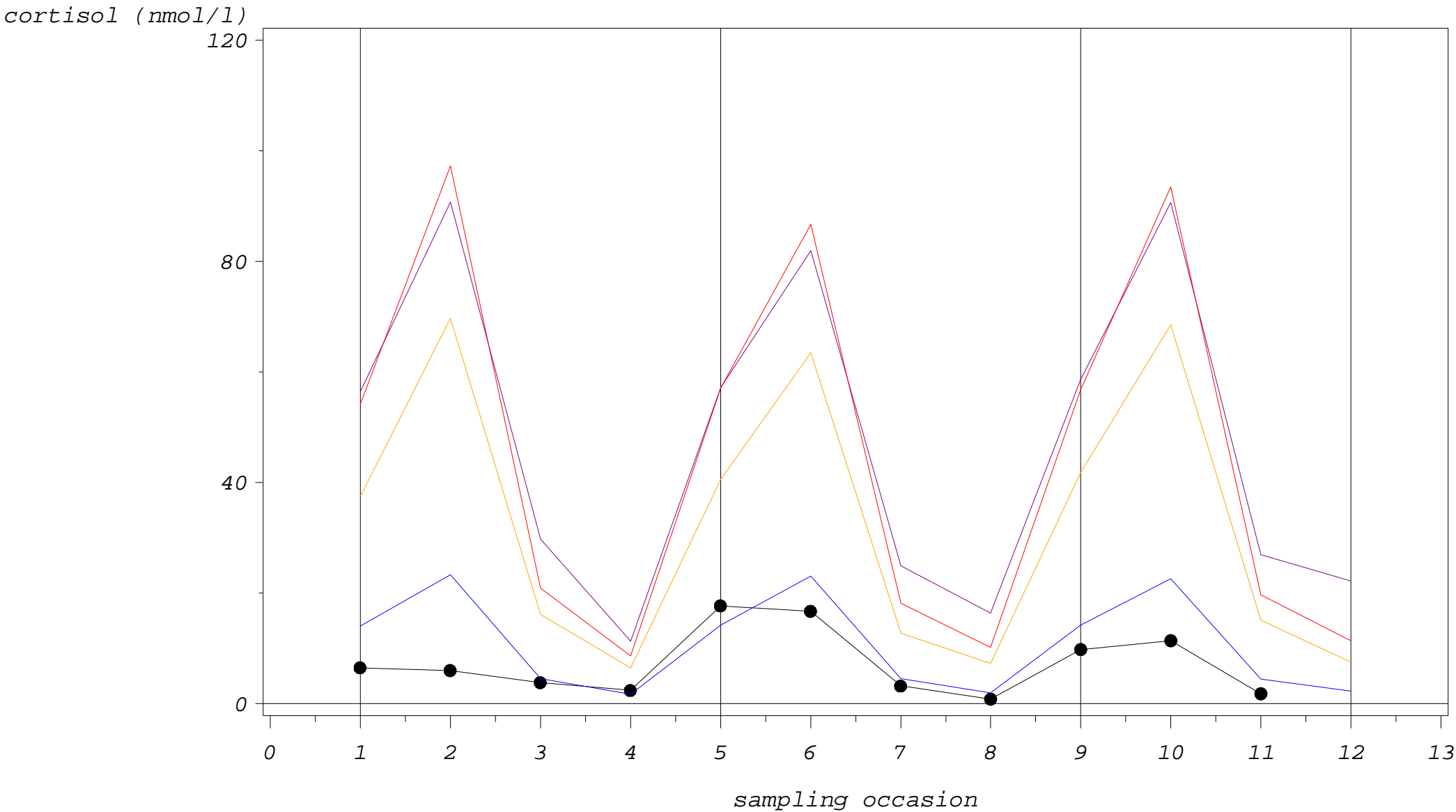
Study 2: cortisol single profiles with outlier fences

CODE=H03303



Study 2: cortisol single profiles with outlier fences

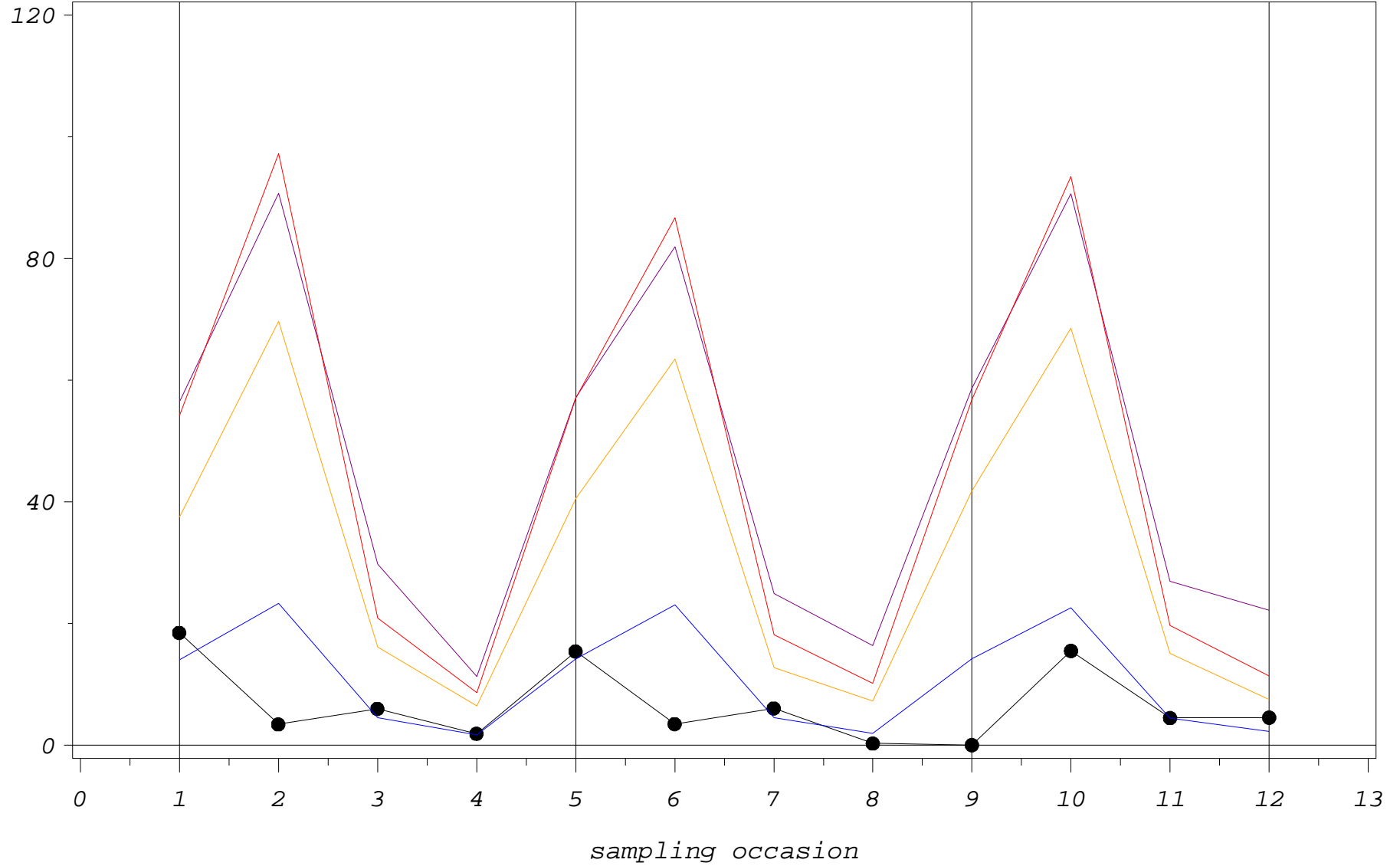
CODE=H03304



Study 2: cortisol single profiles with outlier fences

CODE=H03307

cortisol (nmol/l)



PLOT

●—● Cortisol
— Q3+(3*IQR)

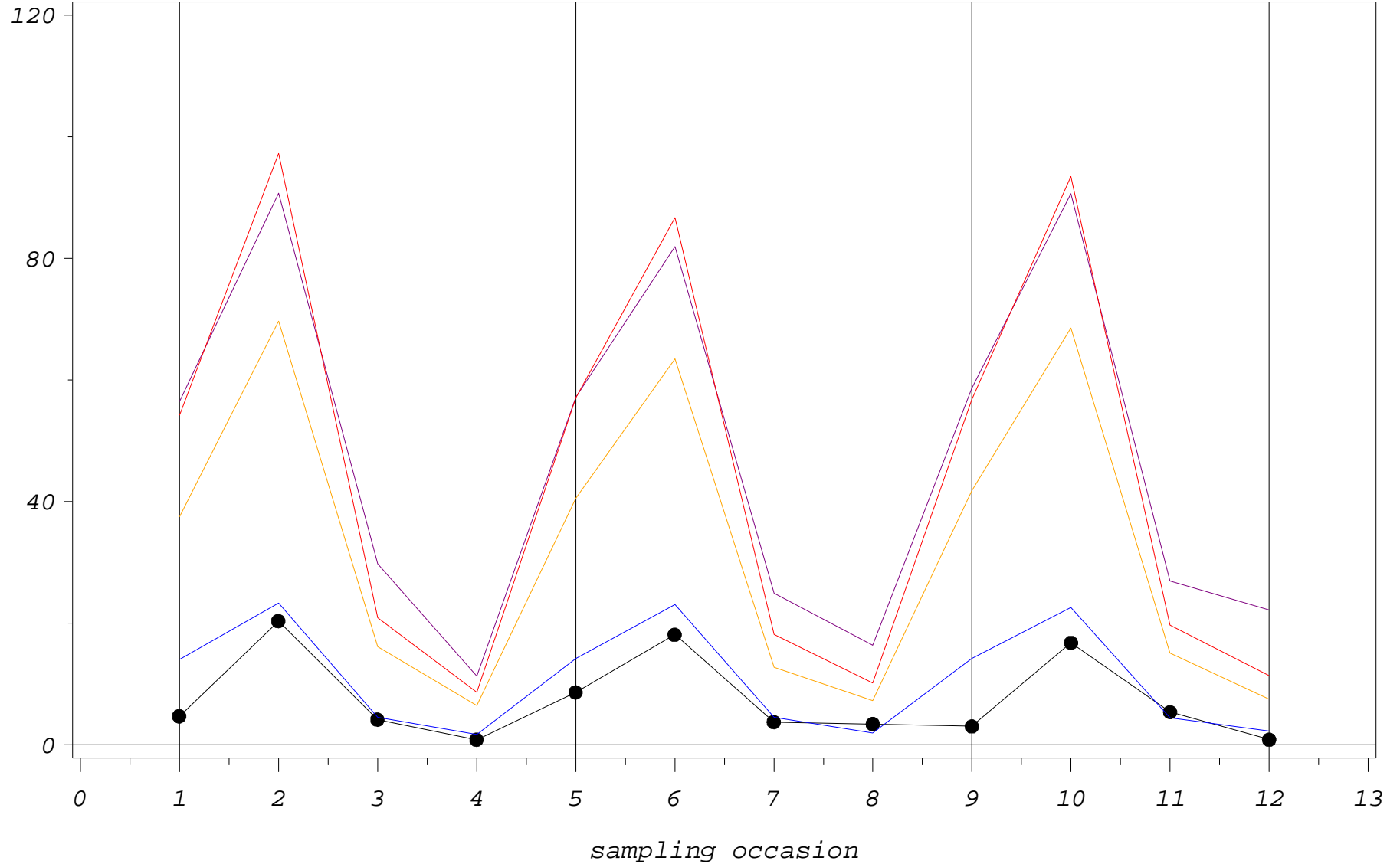
— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
●●● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03308

cortisol (nmol/l)

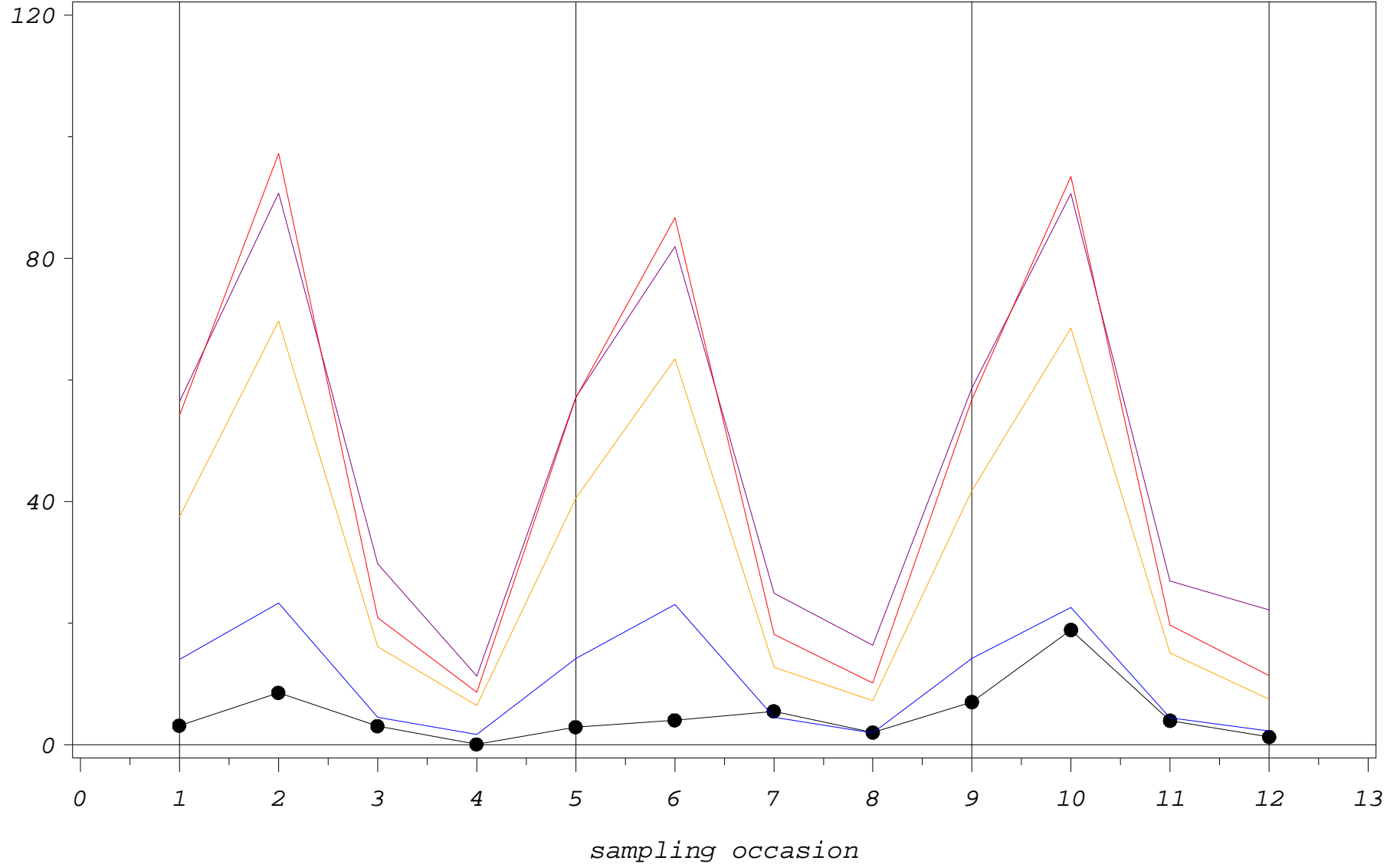


PLOT ●—●—● Cortisol — Median — $MW + (4 * SD)$
 — $Q3 + (3 * IQR)$ — $Q2 + (4 * (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03309

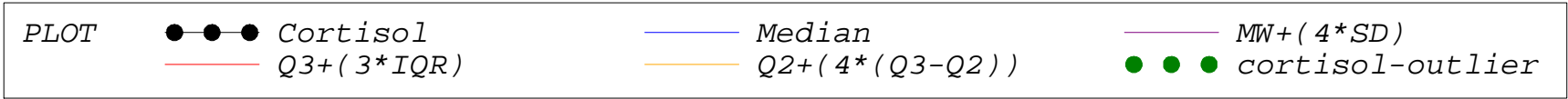
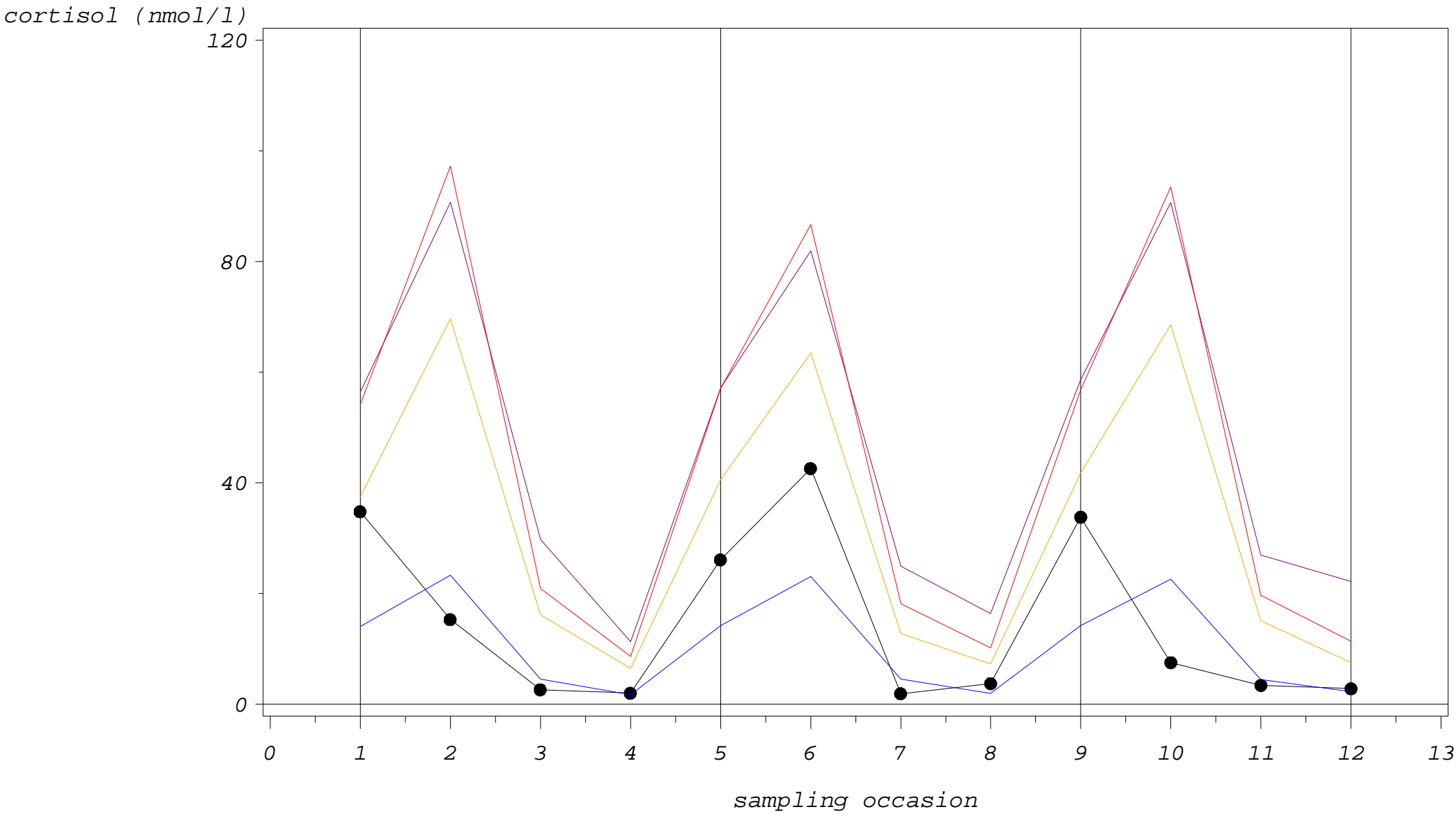
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 \times SD)$
 — $Q3 + (3 \times IQR)$ — $Q2 + (4 \times (Q3 - Q2))$ ● ● ● cortisol-outlier

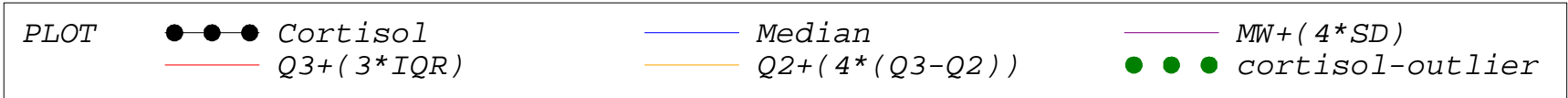
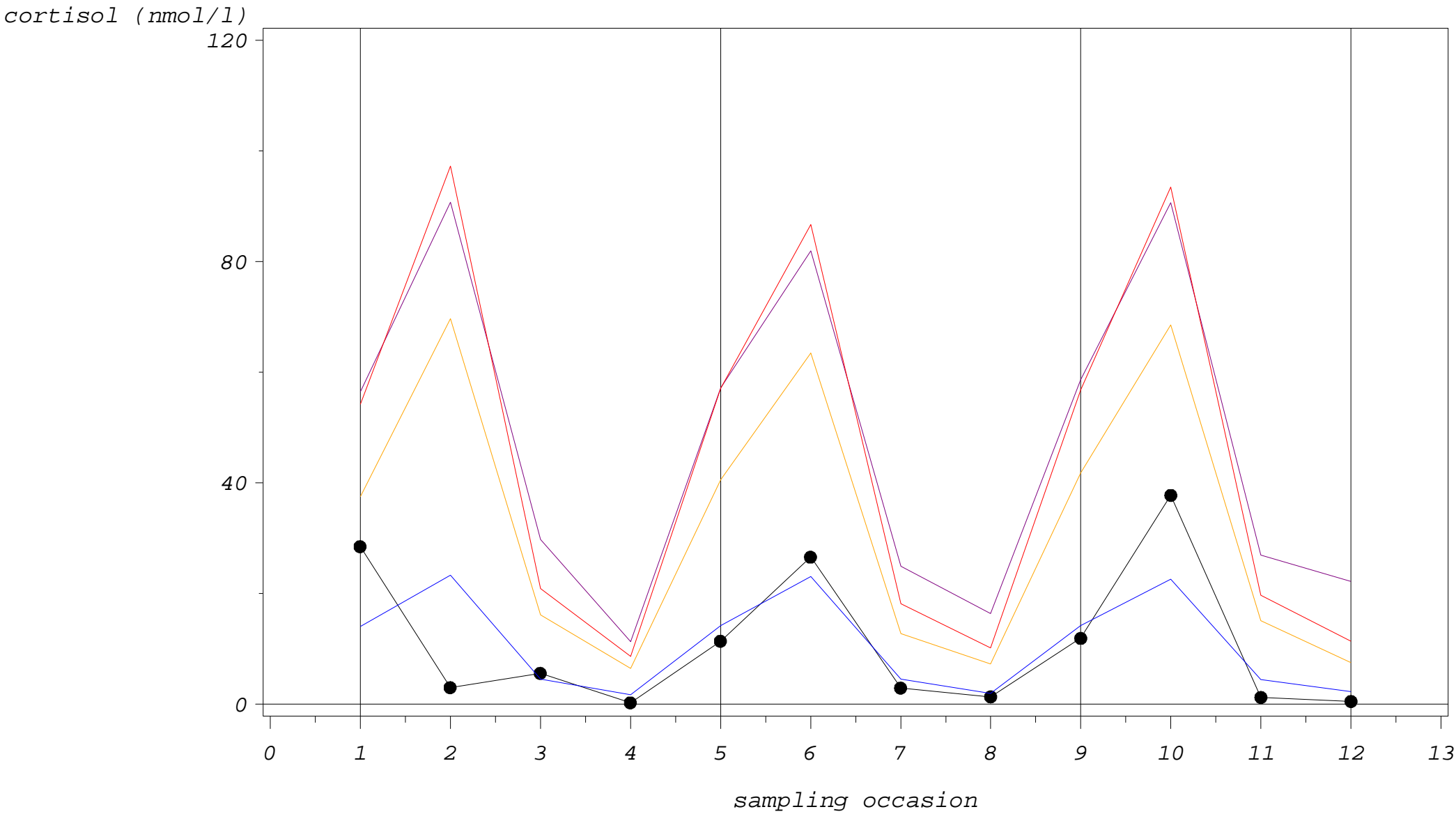
Study 2: cortisol single profiles with outlier fences

CODE=H03310



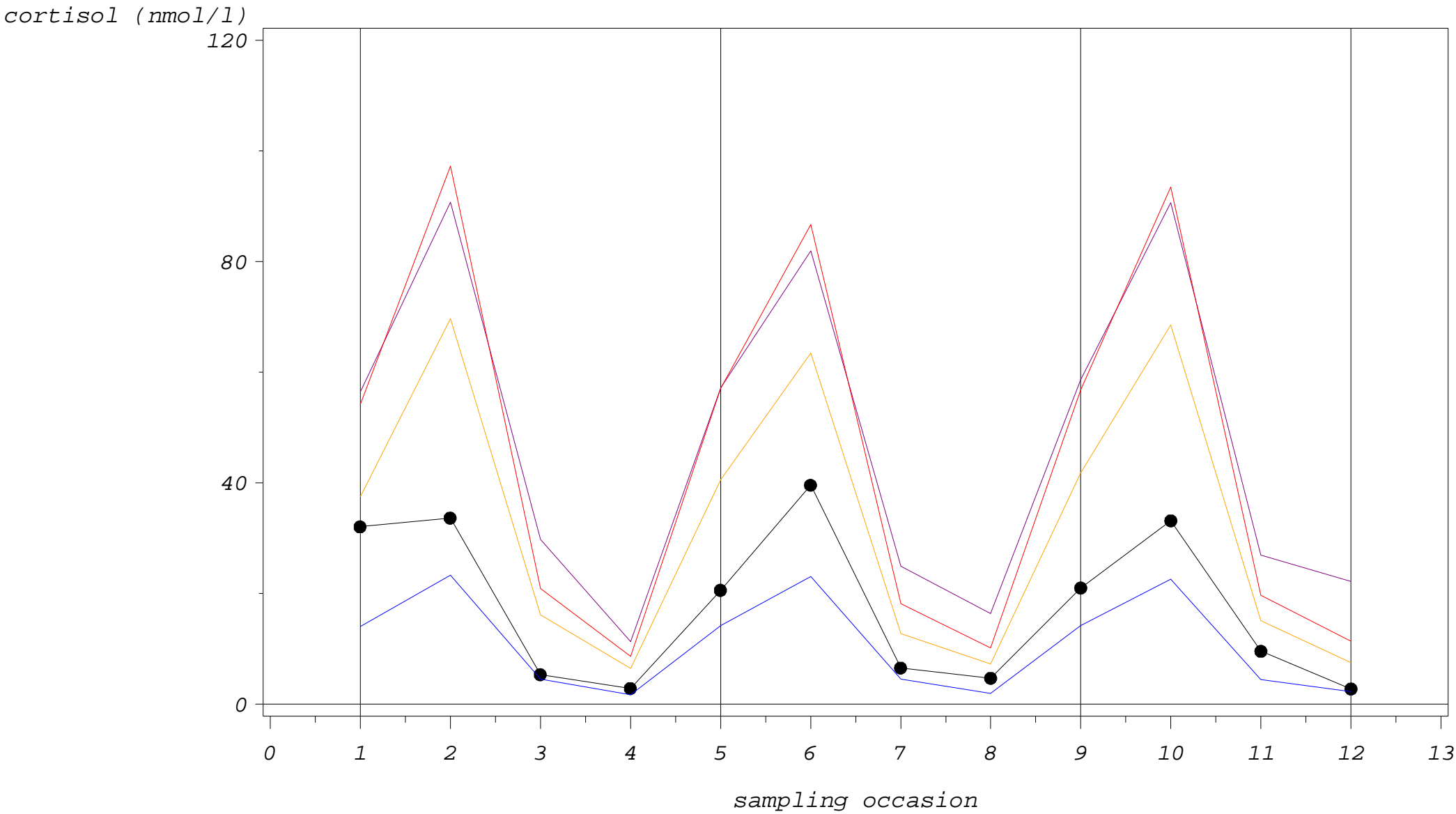
Study 2: cortisol single profiles with outlier fences

CODE=H03311



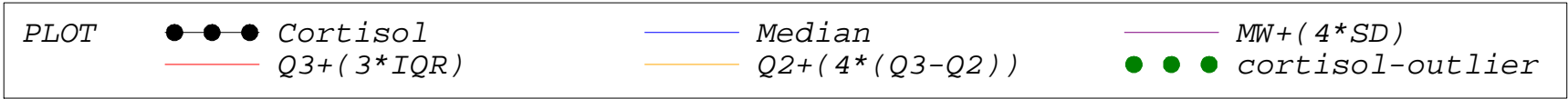
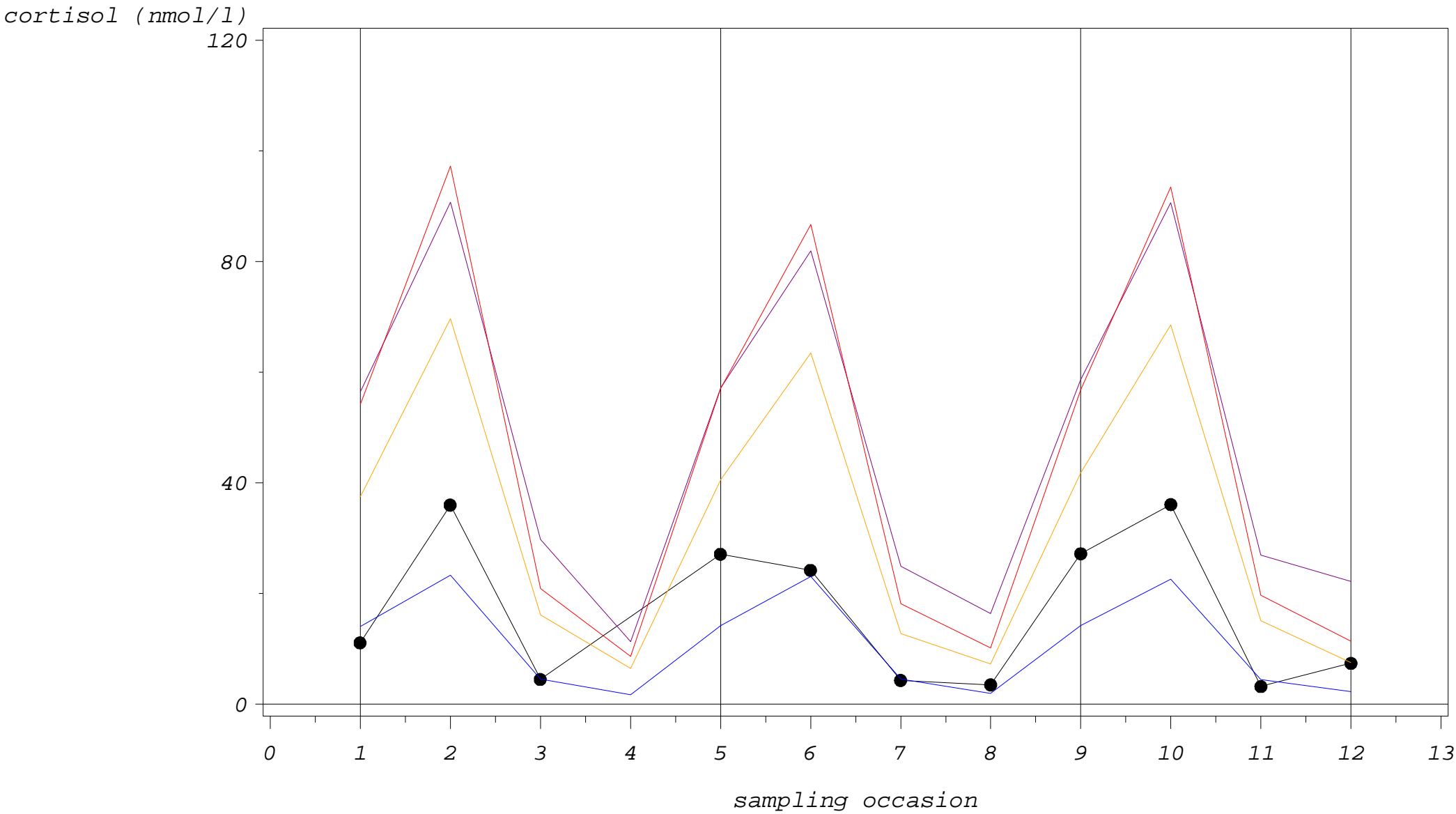
Study 2: cortisol single profiles with outlier fences

CODE=H03312



Study 2: cortisol single profiles with outlier fences

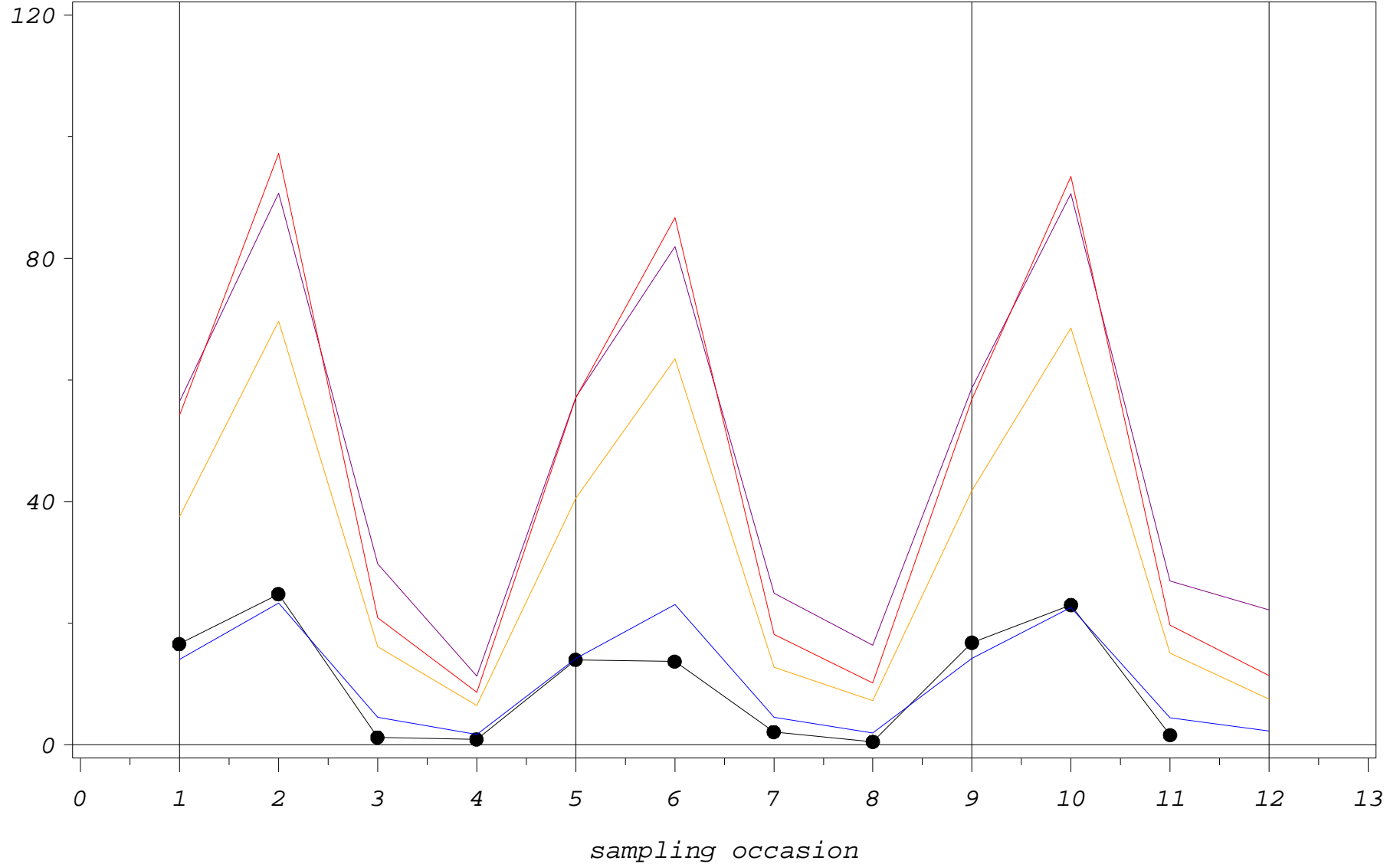
CODE=H03401



Study 2: cortisol single profiles with outlier fences

CODE=H03402

cortisol (nmol/l)

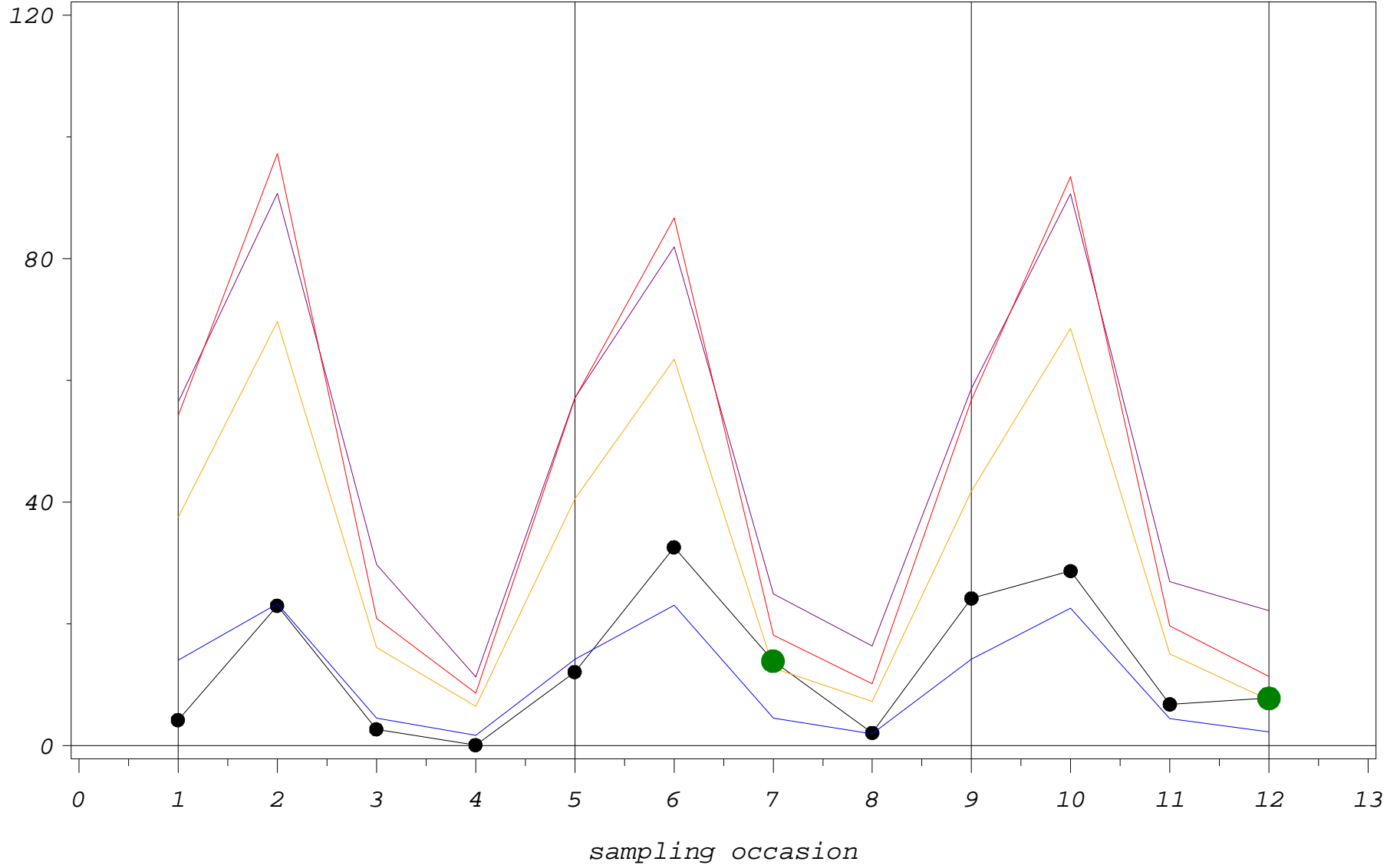


PLOT	●—●—● Cortisol	— Median	— MW+(4*SD)
	— Q3+(3*IQR)	— Q2+(4*(Q3-Q2))	●●● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03403

cortisol (nmol/l)



PLOT

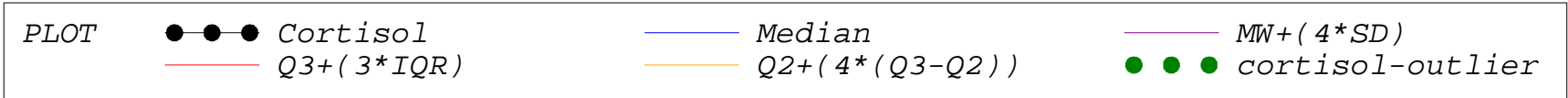
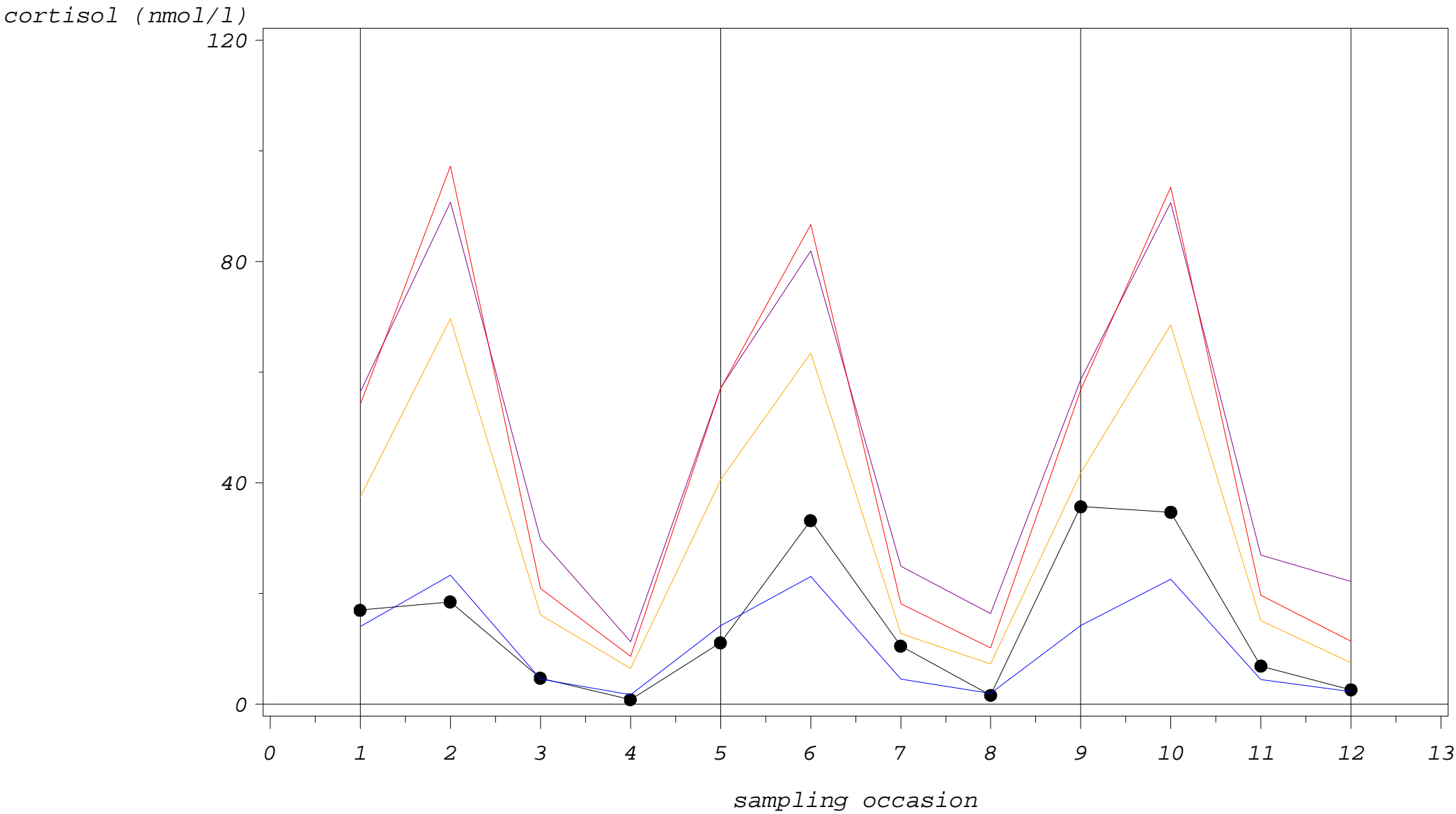
●—● Cortisol
— Q3+(3*IQR)

— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
●●● cortisol-outlier

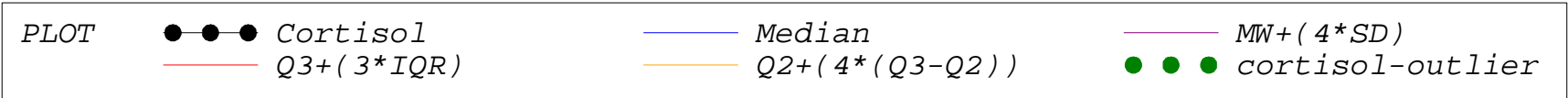
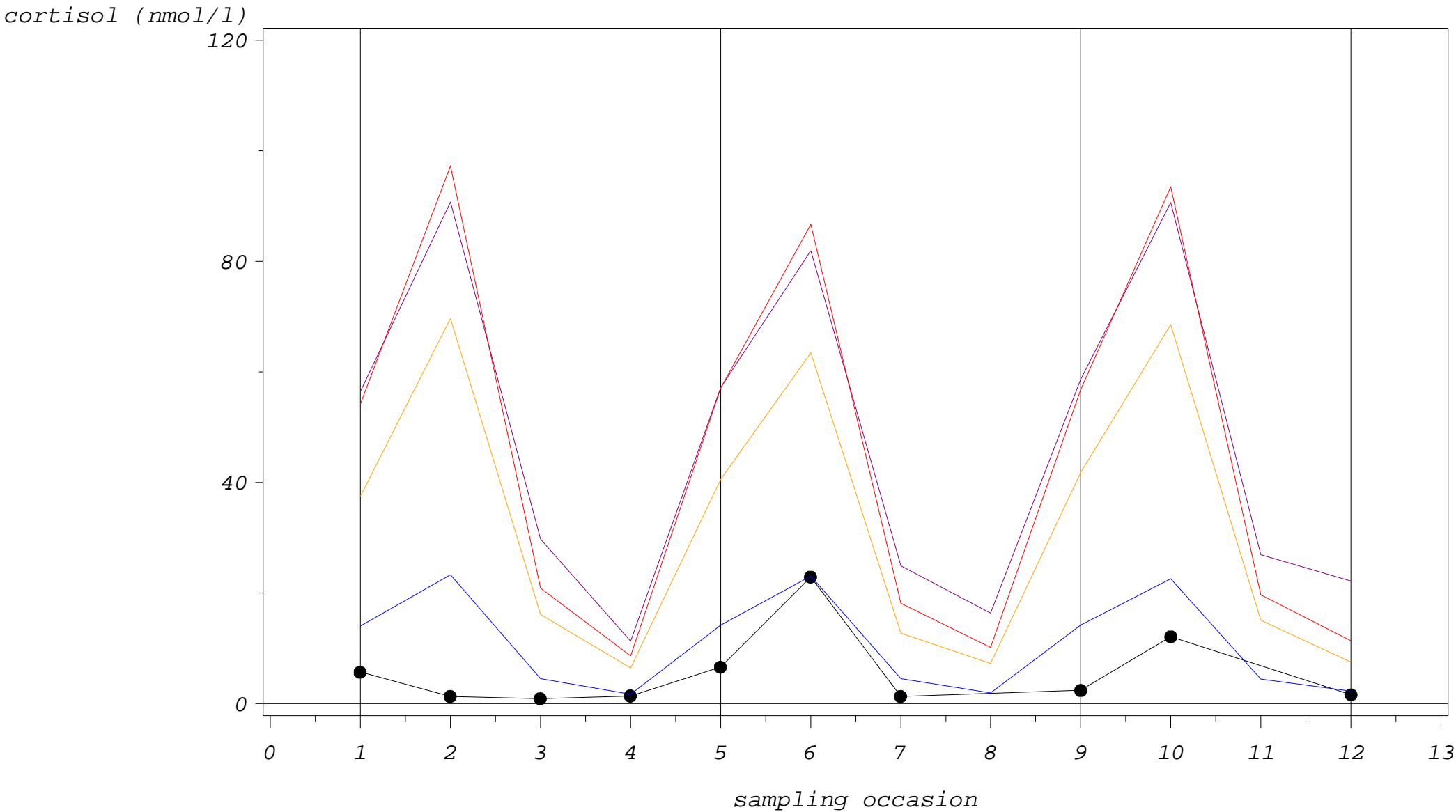
Study 2: cortisol single profiles with outlier fences

CODE=H03404



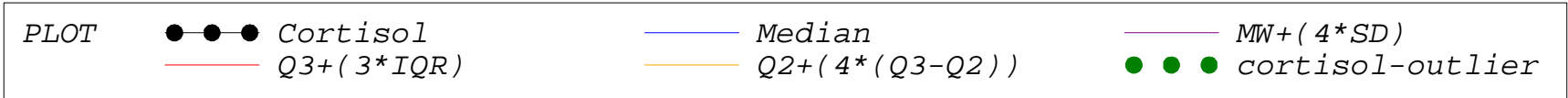
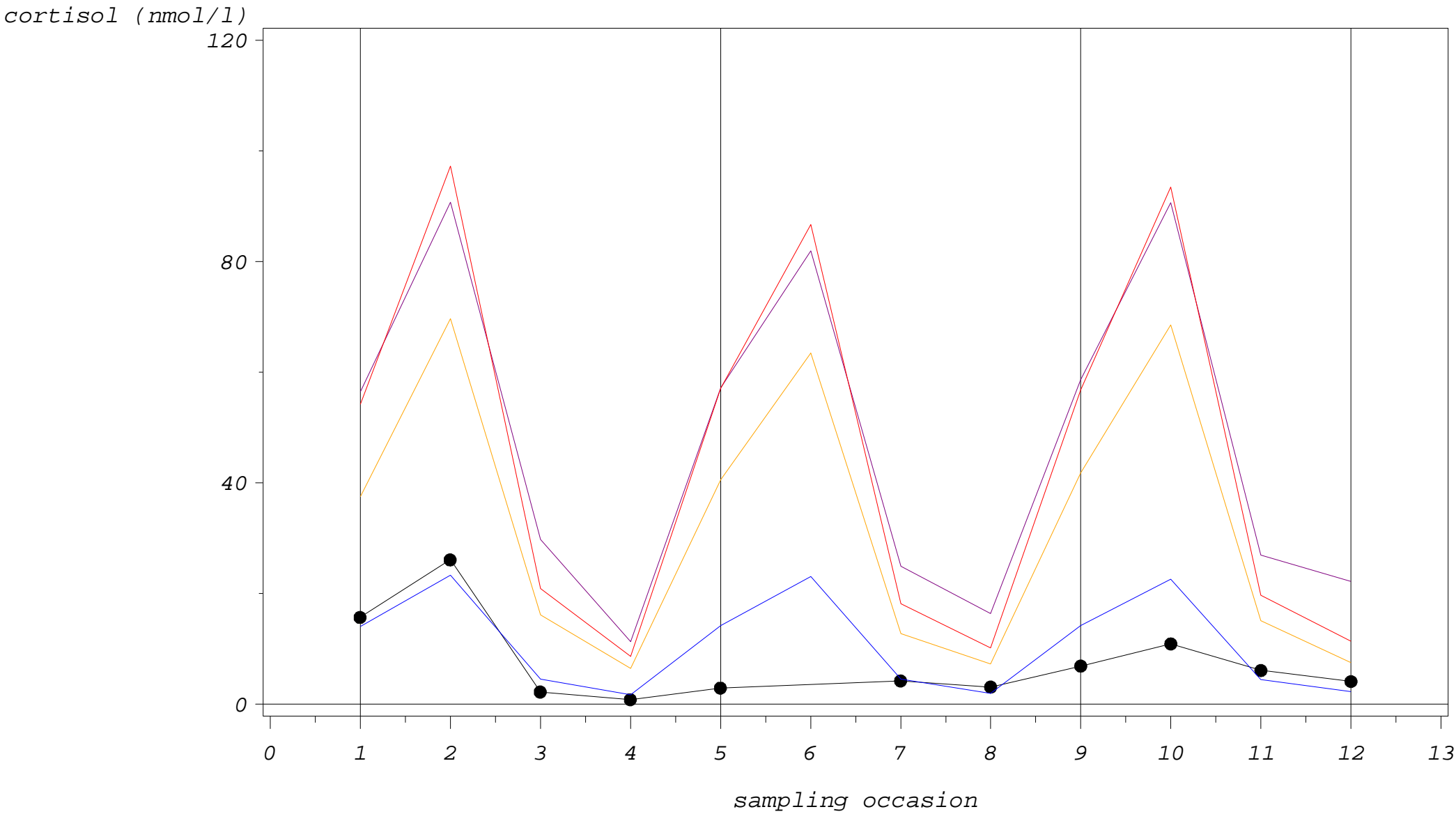
Study 2: cortisol single profiles with outlier fences

CODE=H03405



Study 2: cortisol single profiles with outlier fences

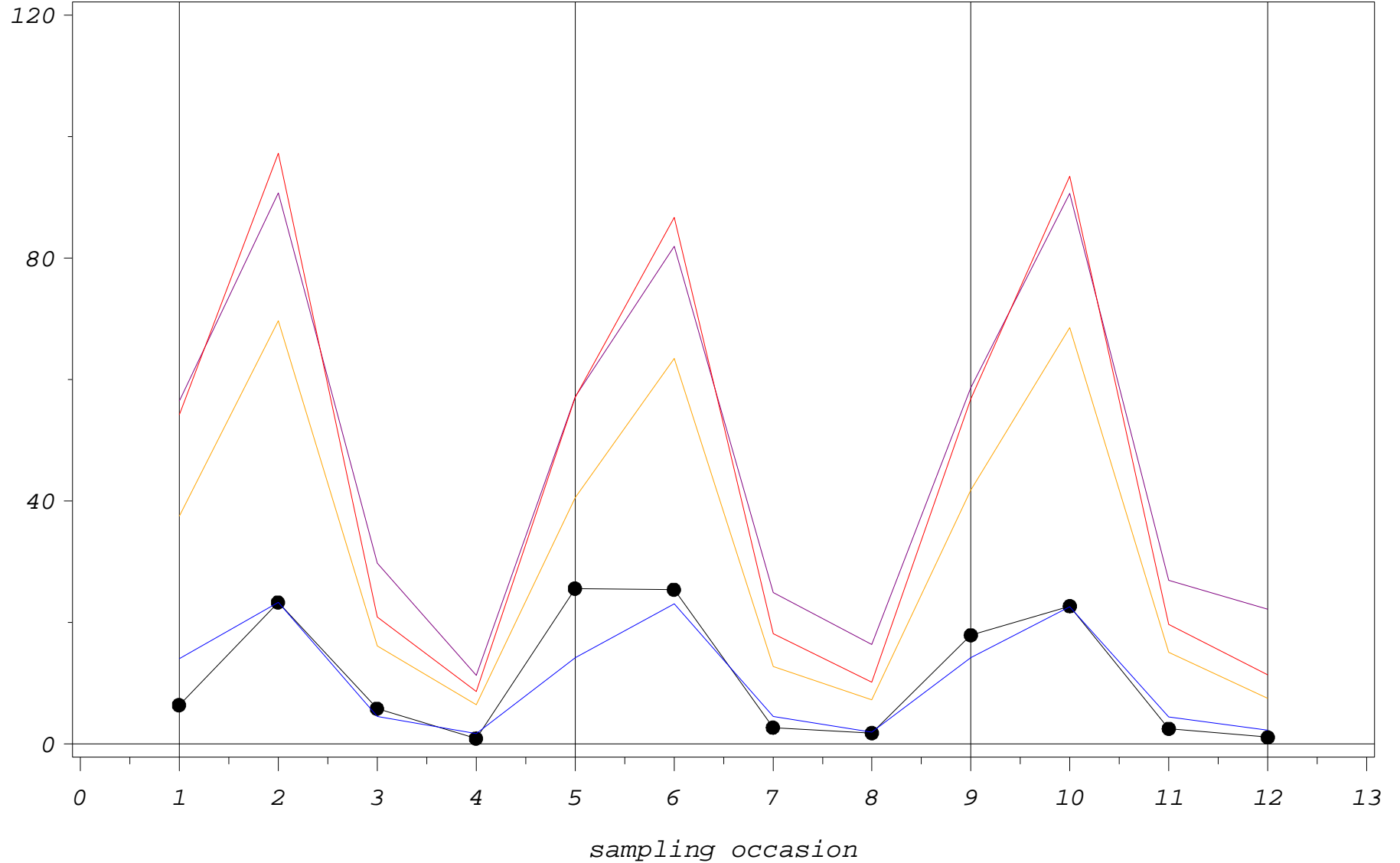
CODE=H03406



Study 2: cortisol single profiles with outlier fences

CODE=H03407

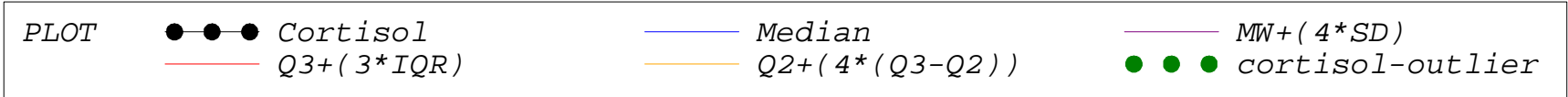
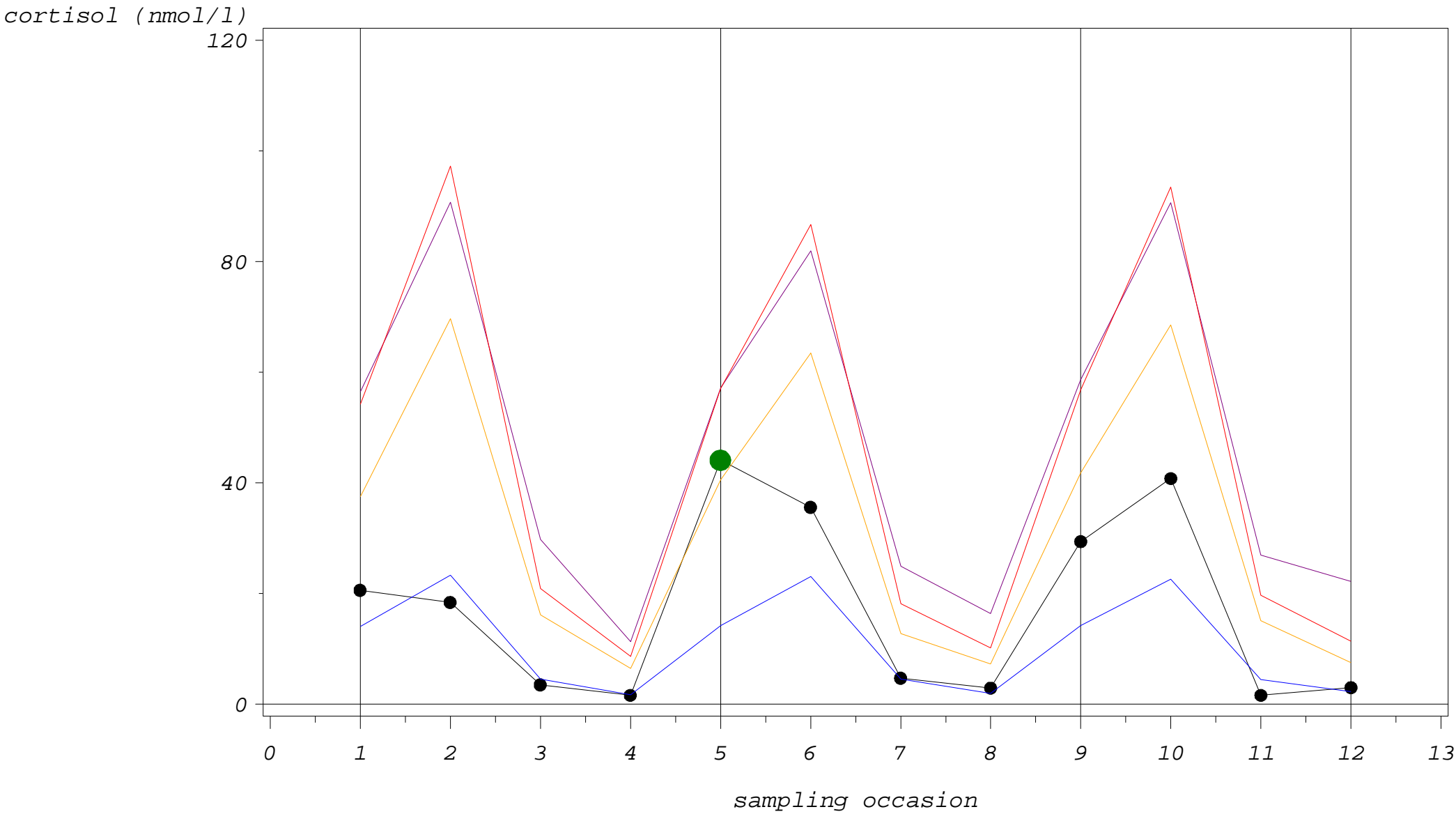
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 \cdot SD)$
 — $Q3 + (3 \cdot IQR)$ — $Q2 + (4 \cdot (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

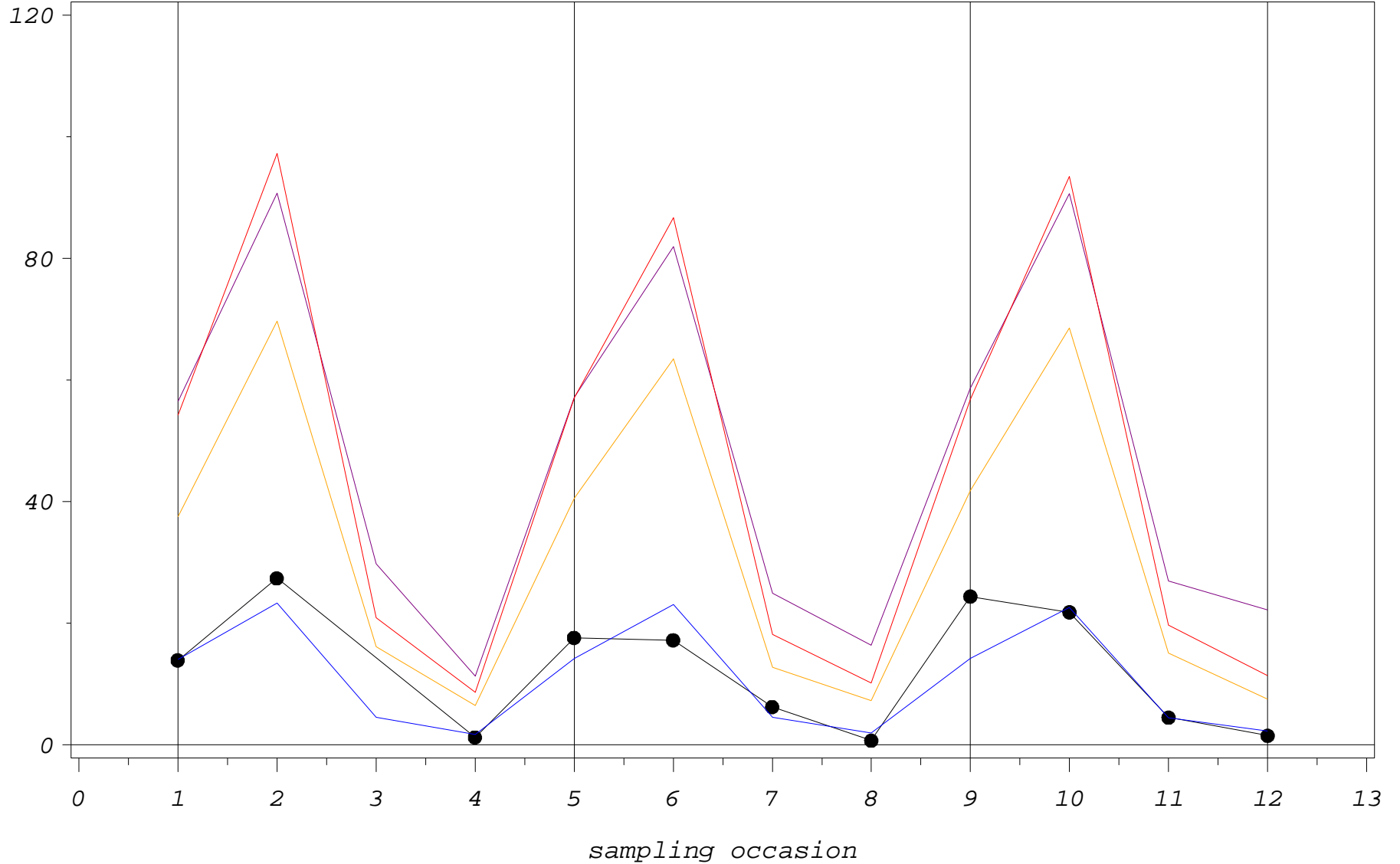
CODE=H03408



Study 2: cortisol single profiles with outlier fences

CODE=H03410

cortisol (nmol/l)

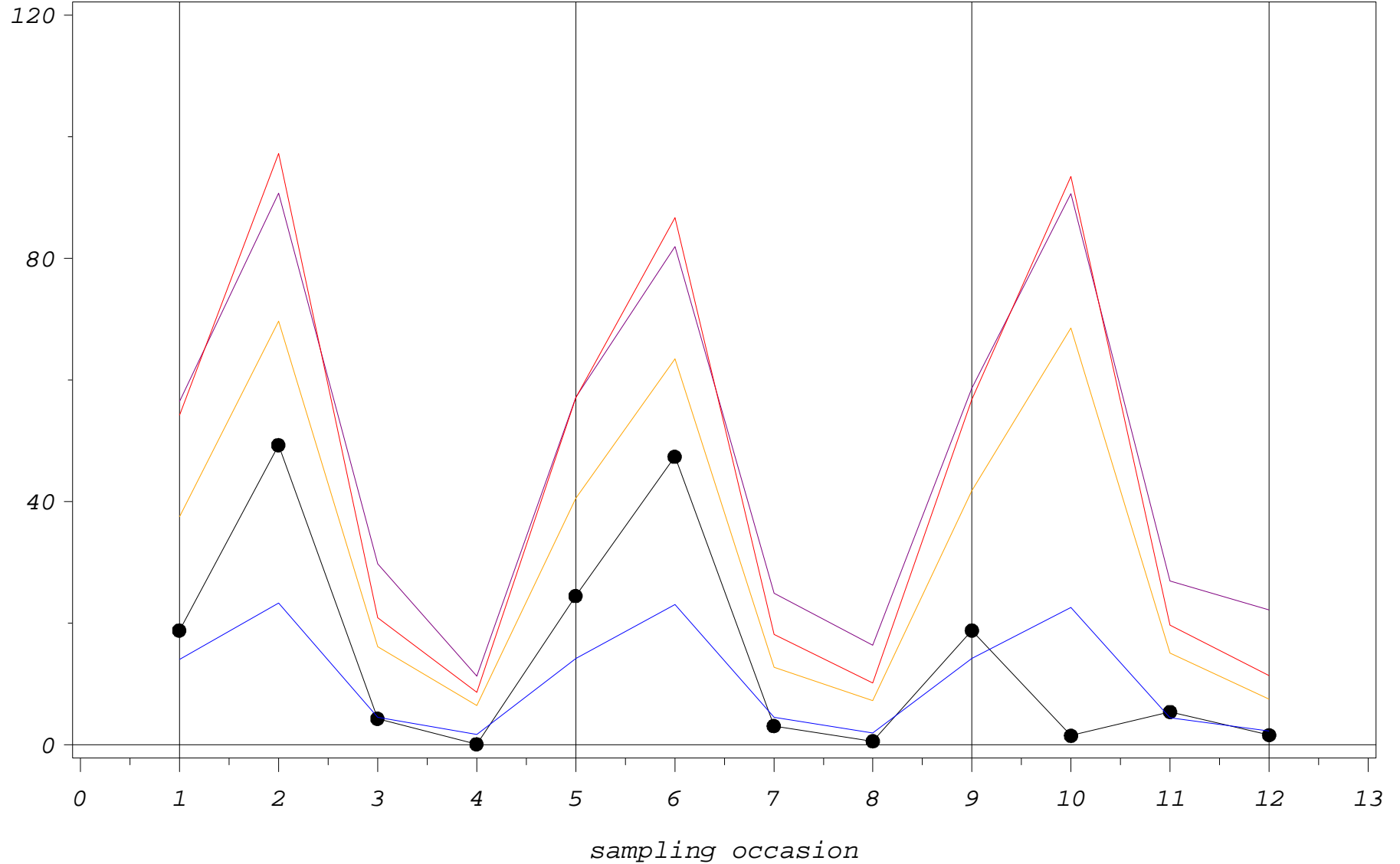


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03411

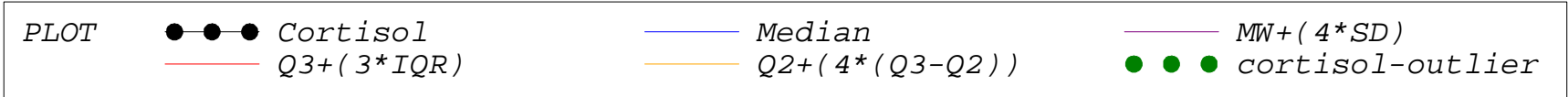
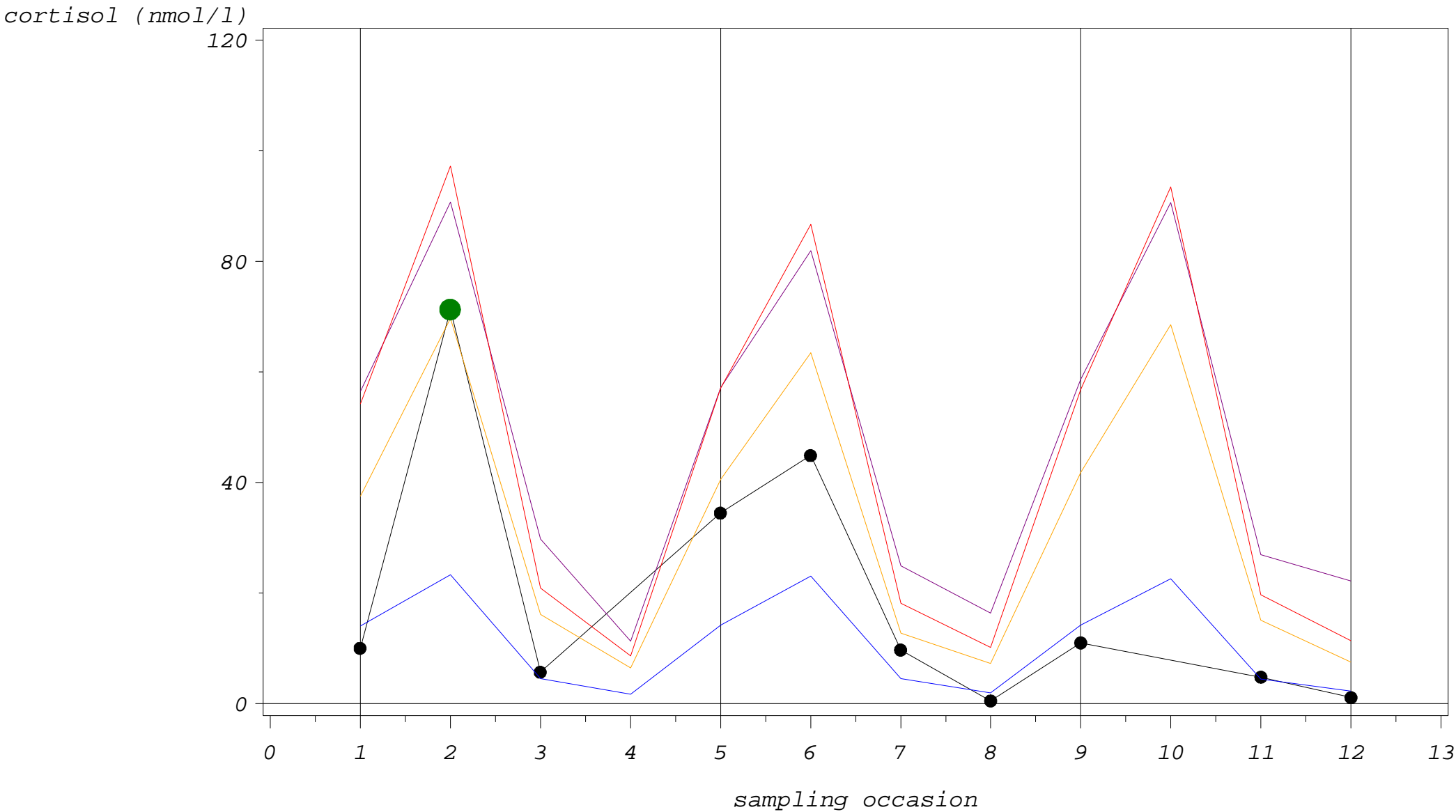
cortisol (nmol/l)



PLOT	●—●—● Cortisol	— Median	— MW+(4*SD)
	— Q3+(3*IQR)	— Q2+(4*(Q3-Q2))	● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

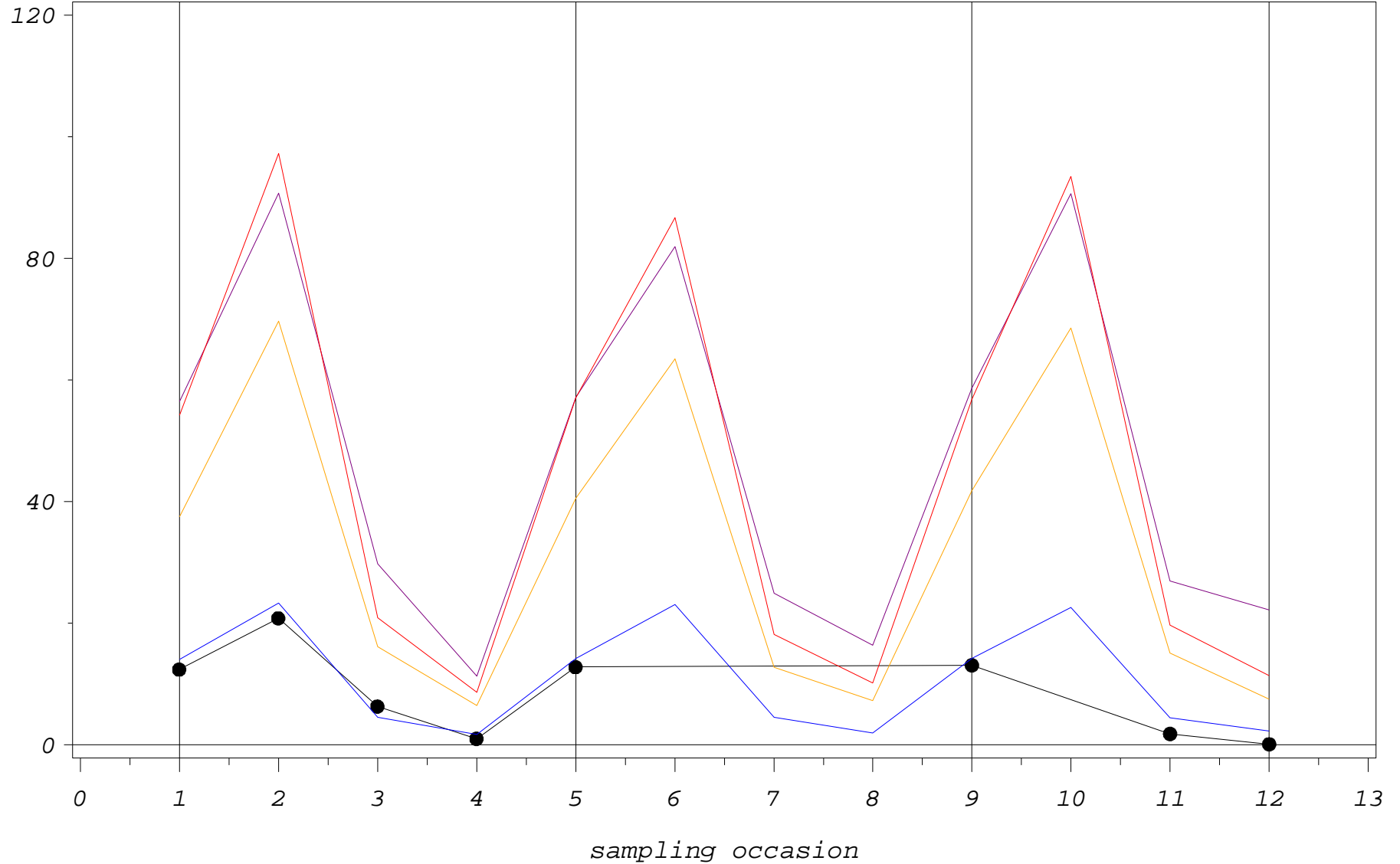
CODE=H03412



Study 2: cortisol single profiles with outlier fences

CODE=H03413

cortisol (nmol/l)

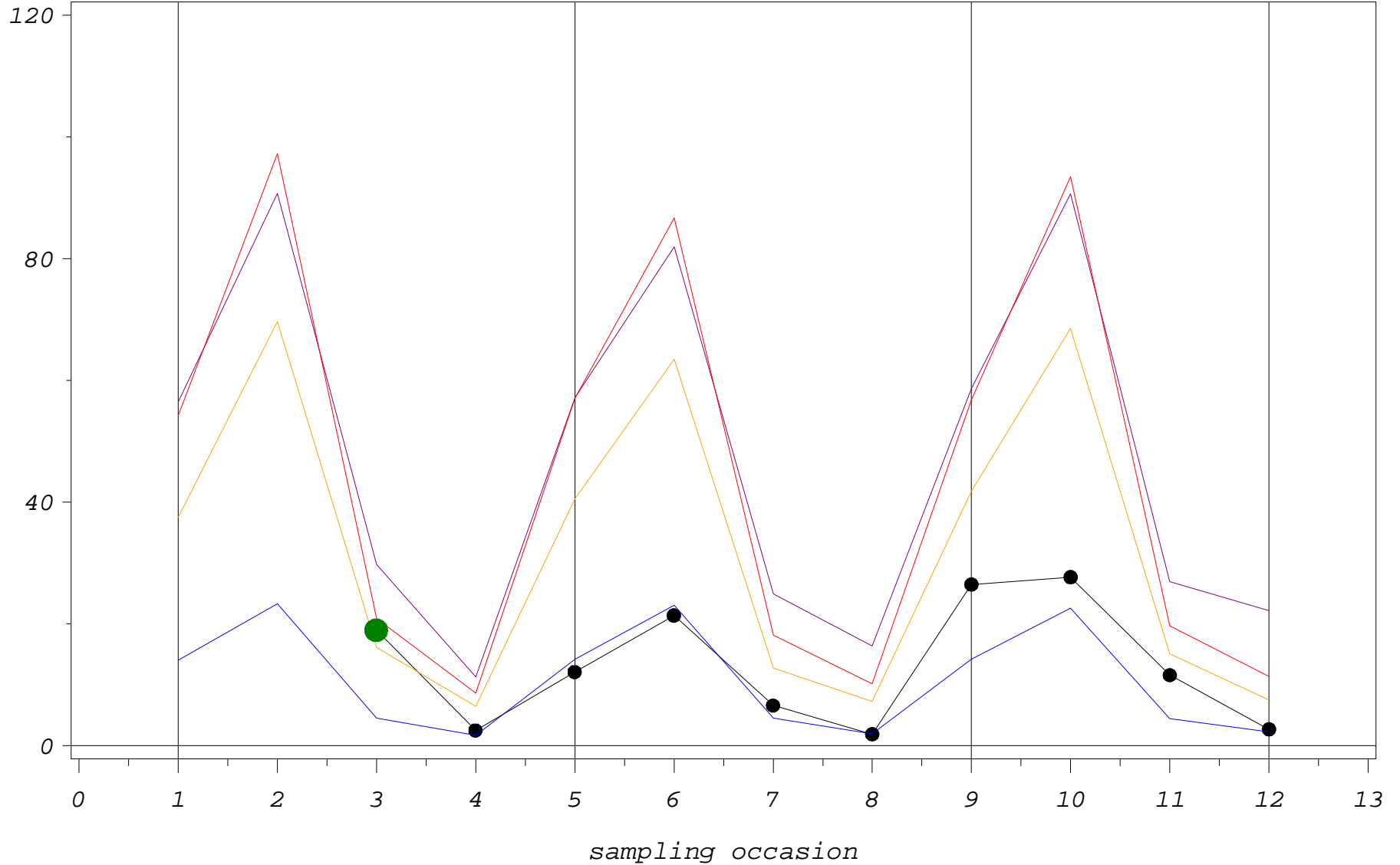


PLOT ●—●—● Cortisol — Median — $MW + (4 \times SD)$
 — $Q3 + (3 \times IQR)$ — $Q2 + (4 \times (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03414

cortisol (nmol/l)



PLOT

●—●—● Cortisol
— Q3+(3*IQR)

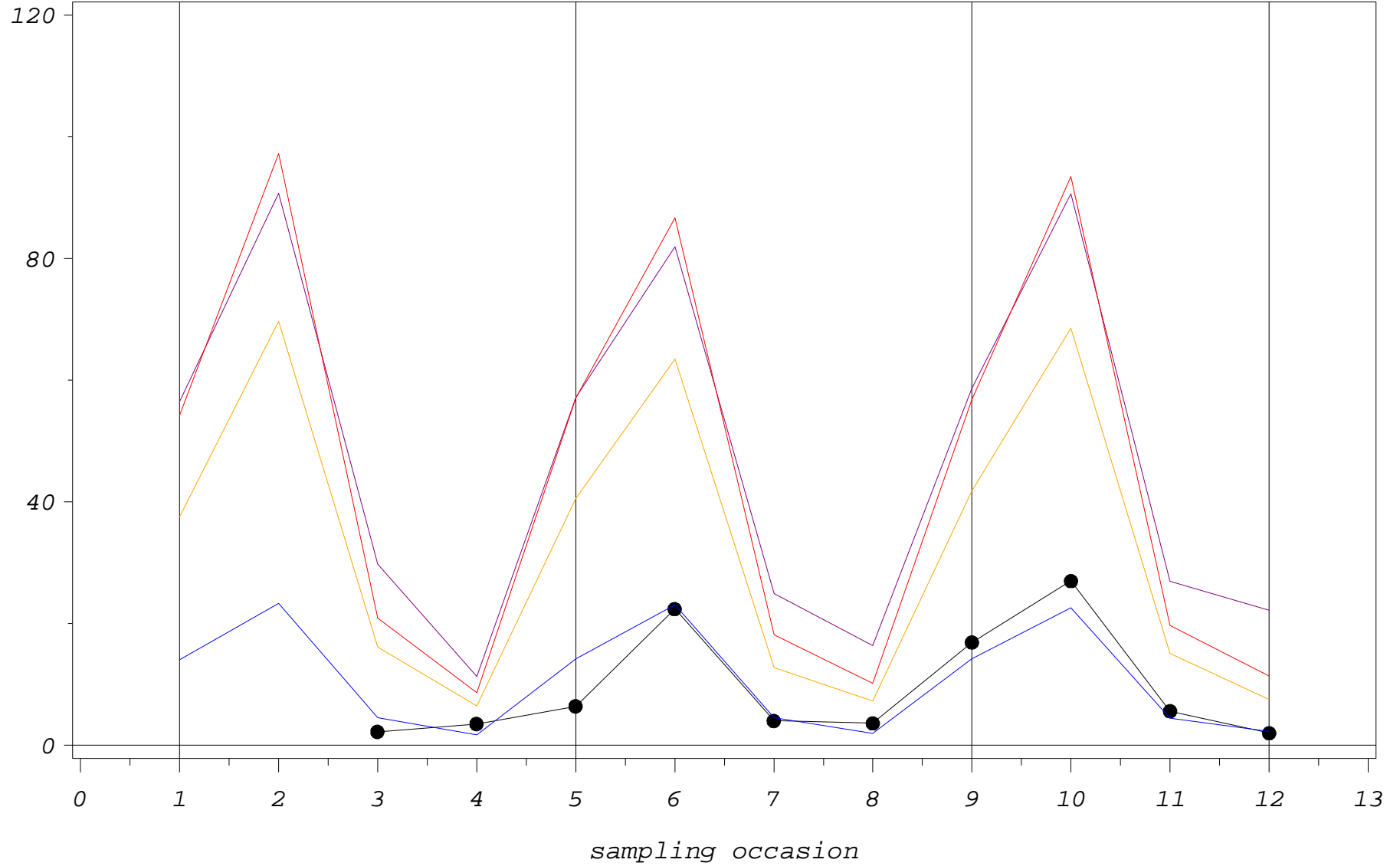
— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03415

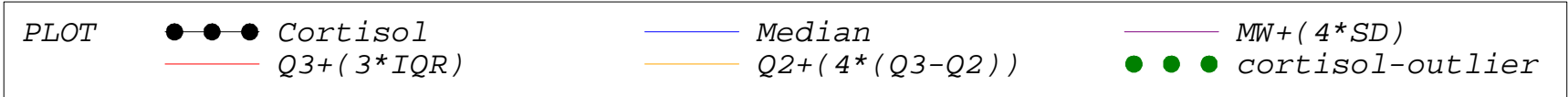
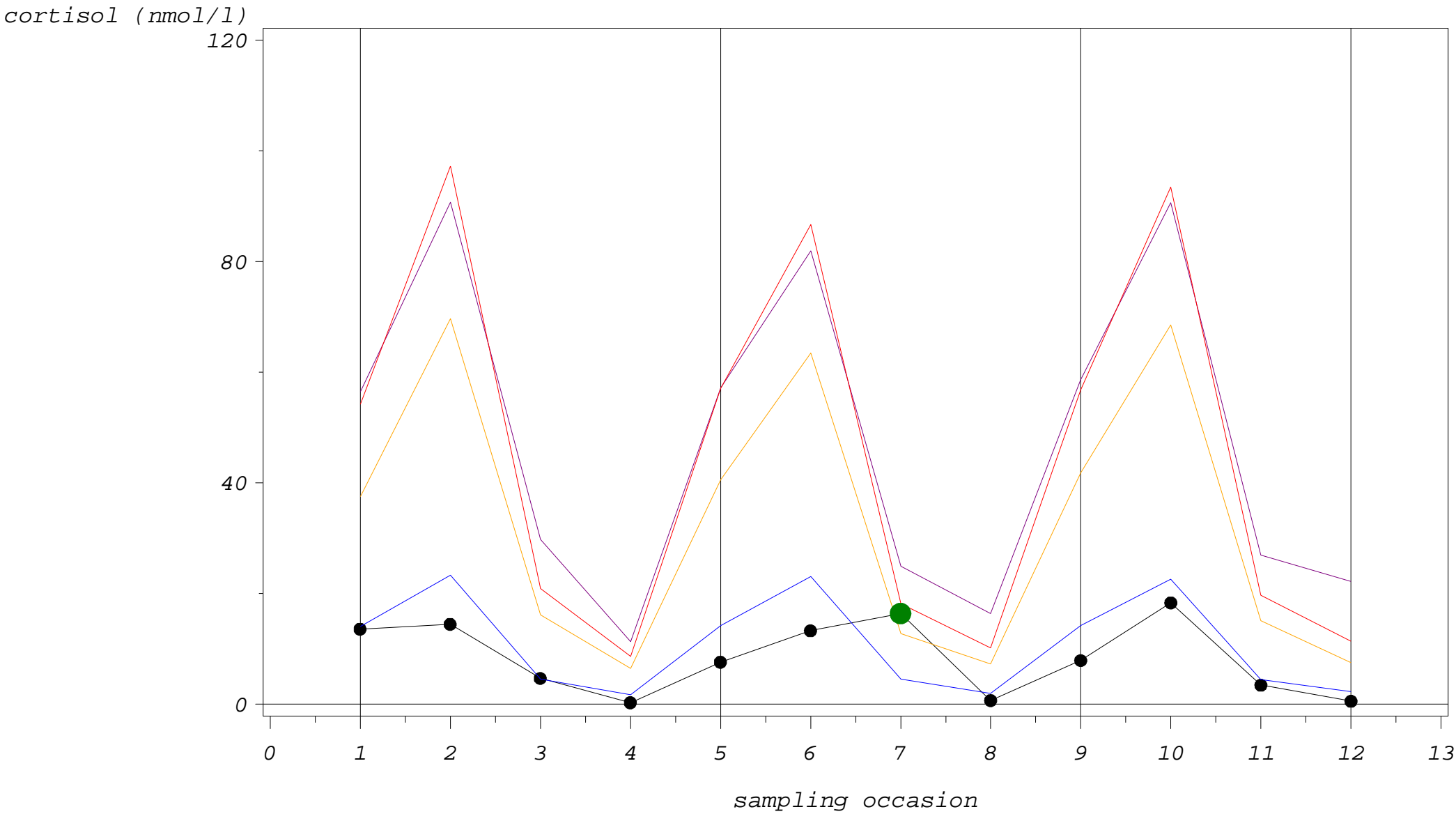
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

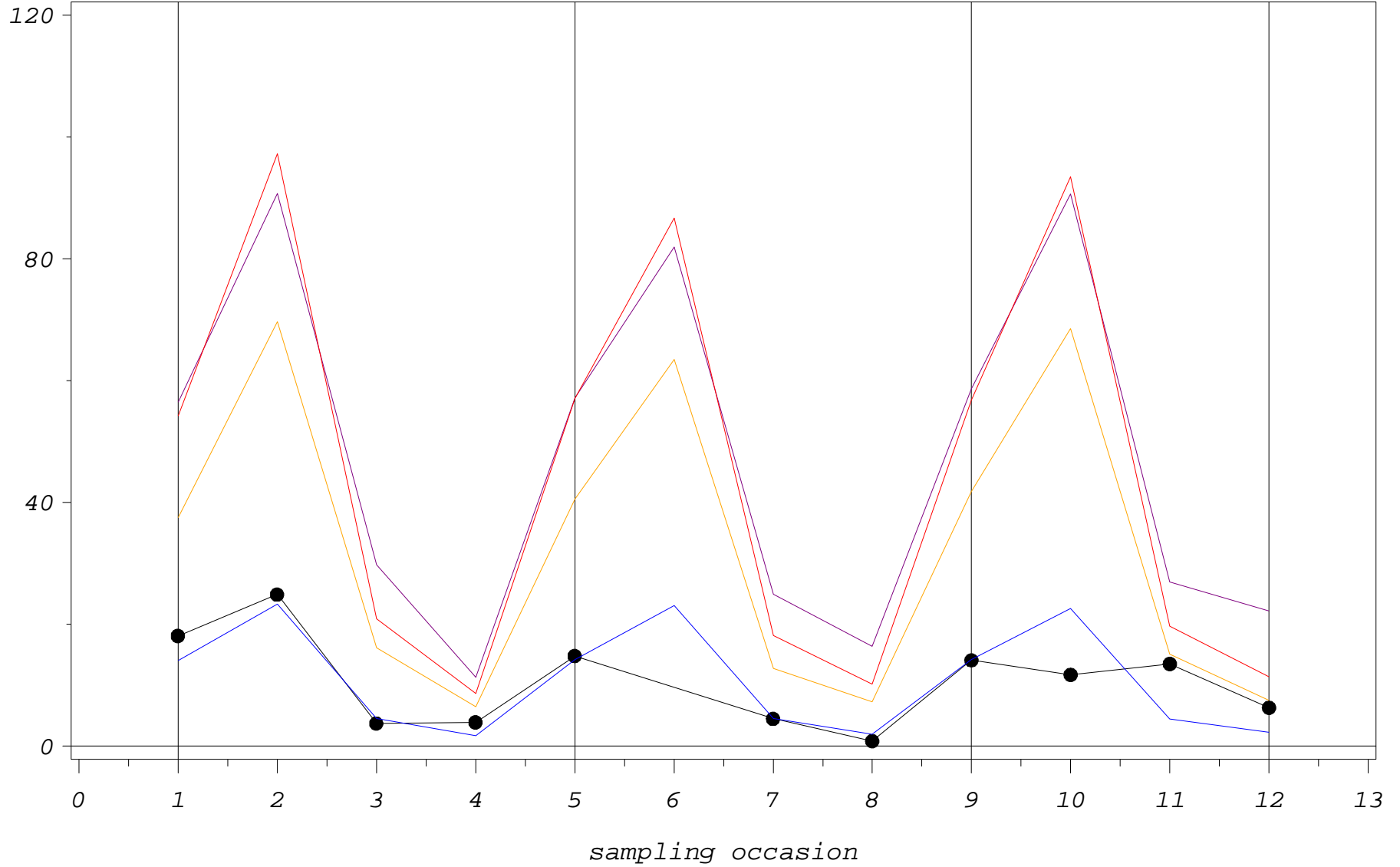
CODE=H03416



Study 2: cortisol single profiles with outlier fences

CODE=H03501

cortisol (nmol/l)

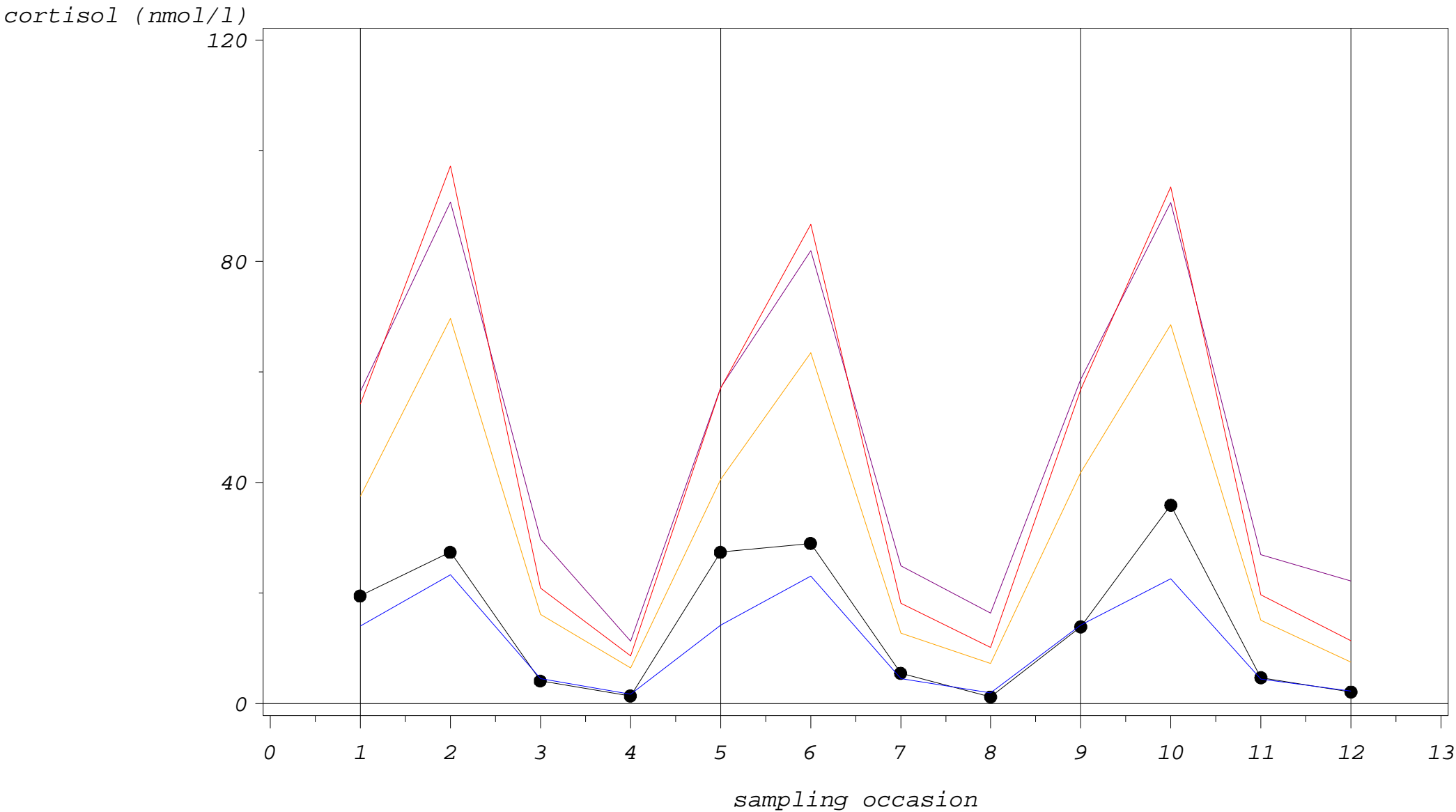


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

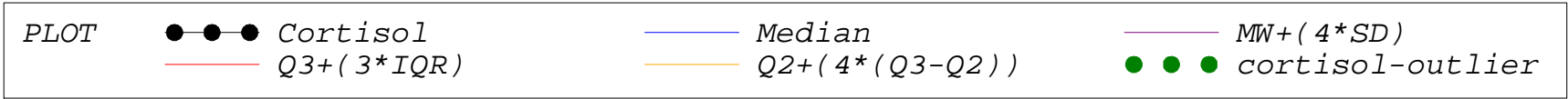
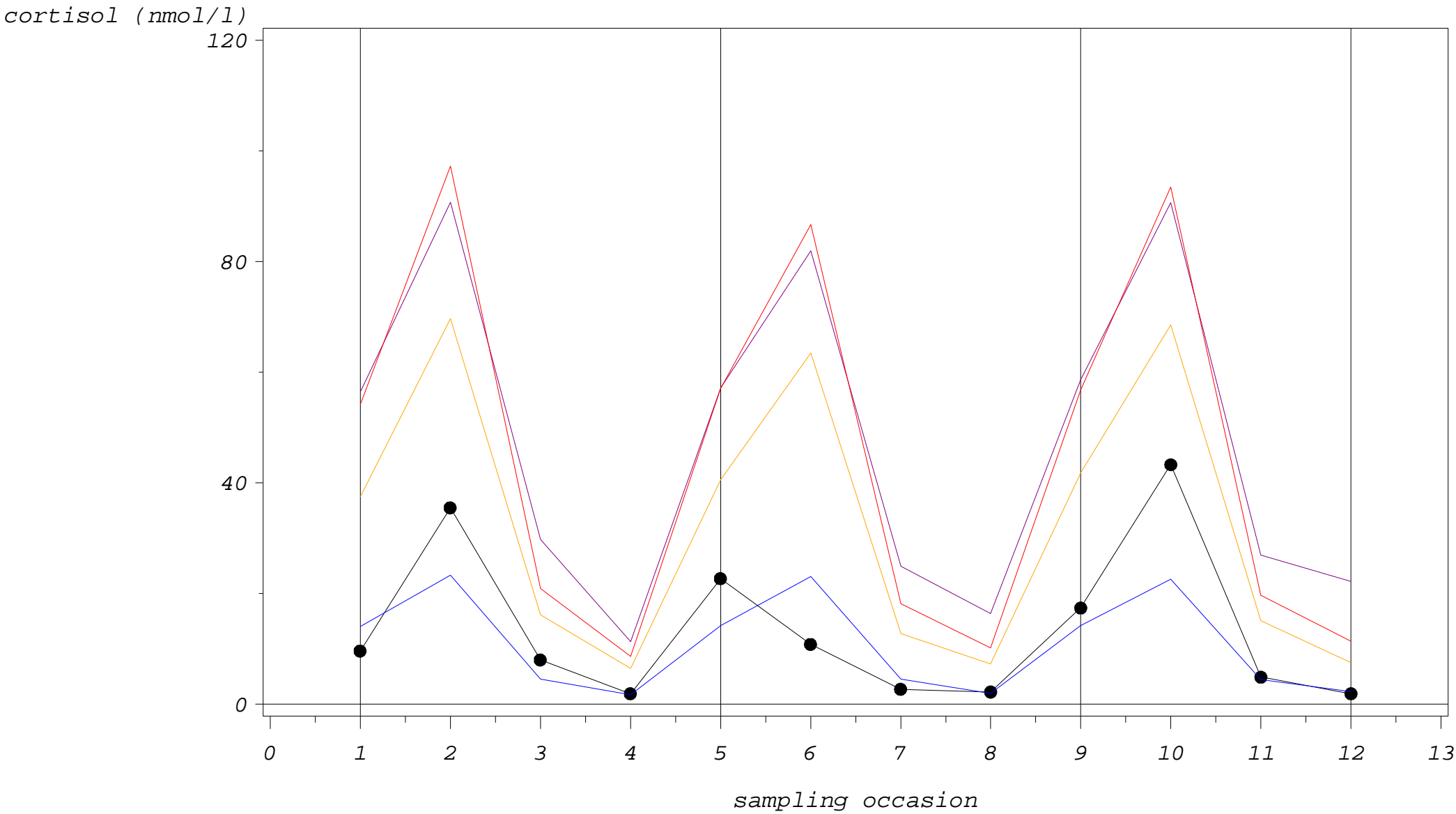
Study 2: cortisol single profiles with outlier fences

CODE=H03502



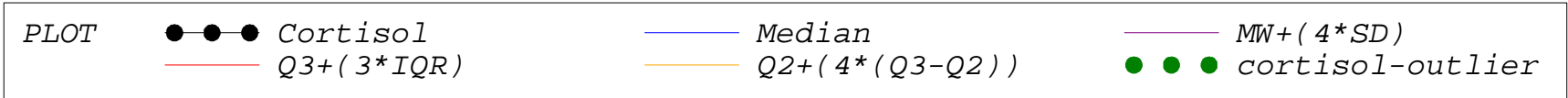
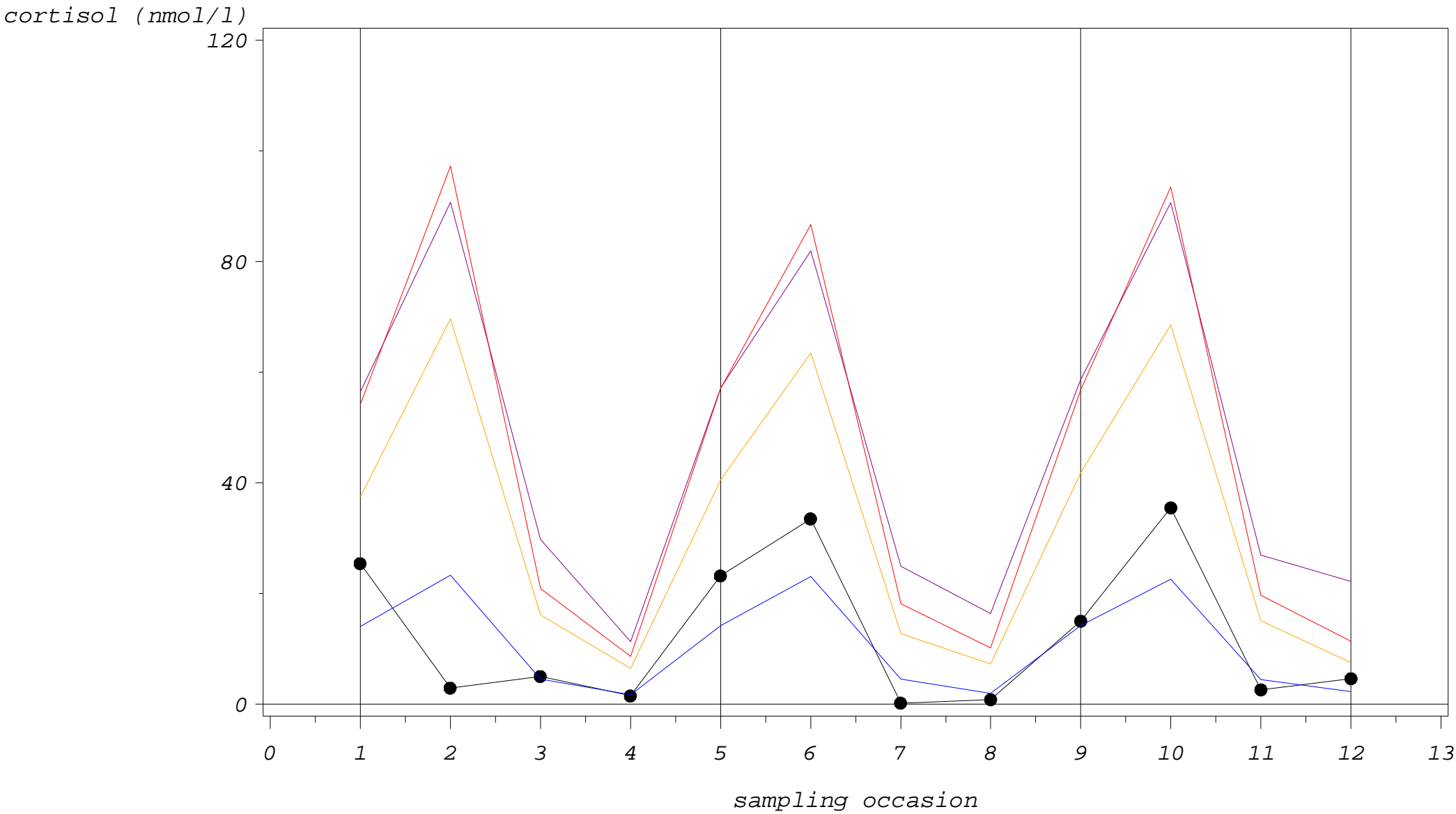
Study 2: cortisol single profiles with outlier fences

CODE=H03503



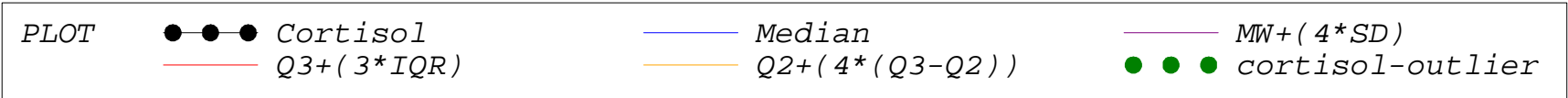
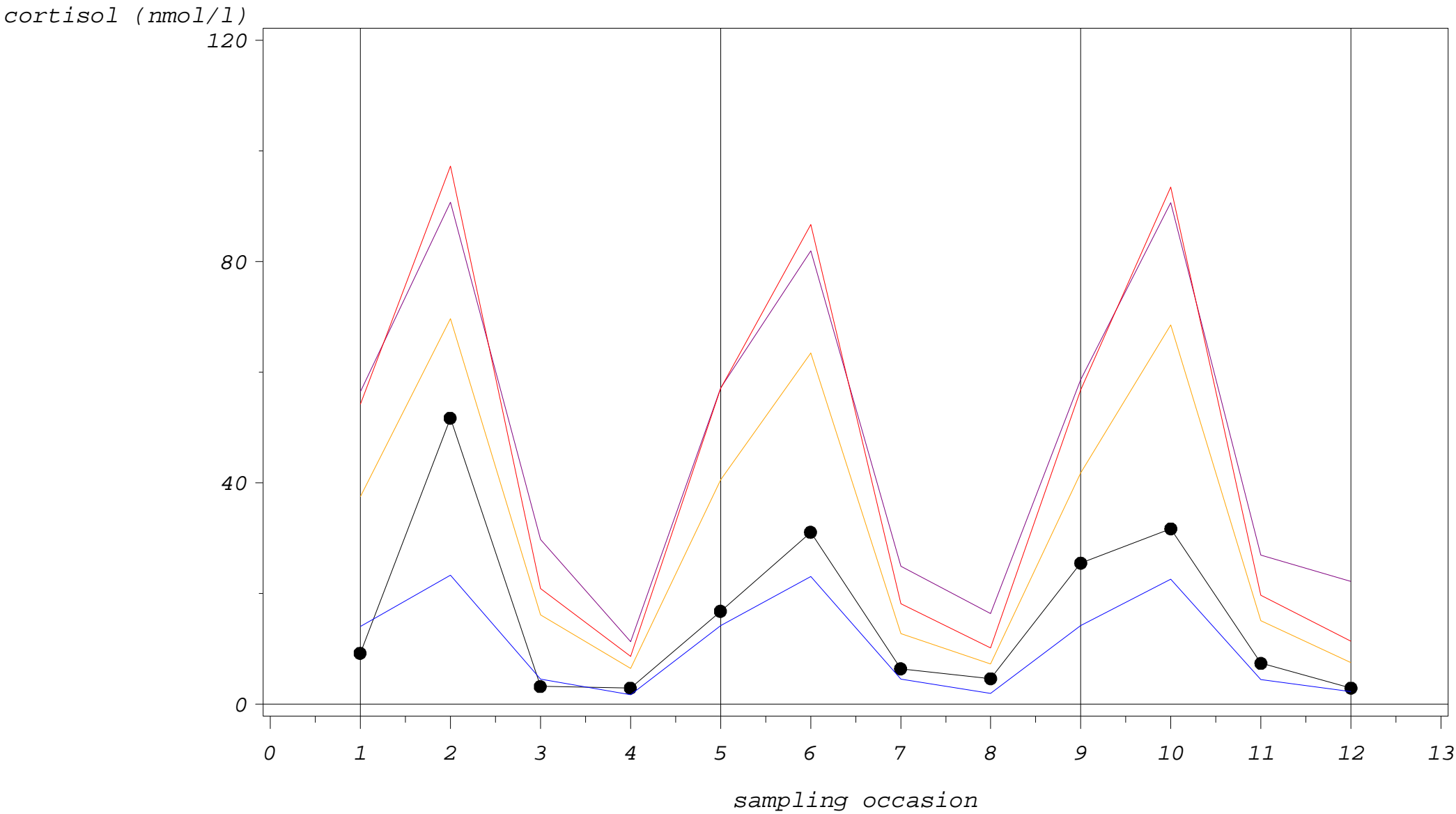
Study 2: cortisol single profiles with outlier fences

CODE=H03504



Study 2: cortisol single profiles with outlier fences

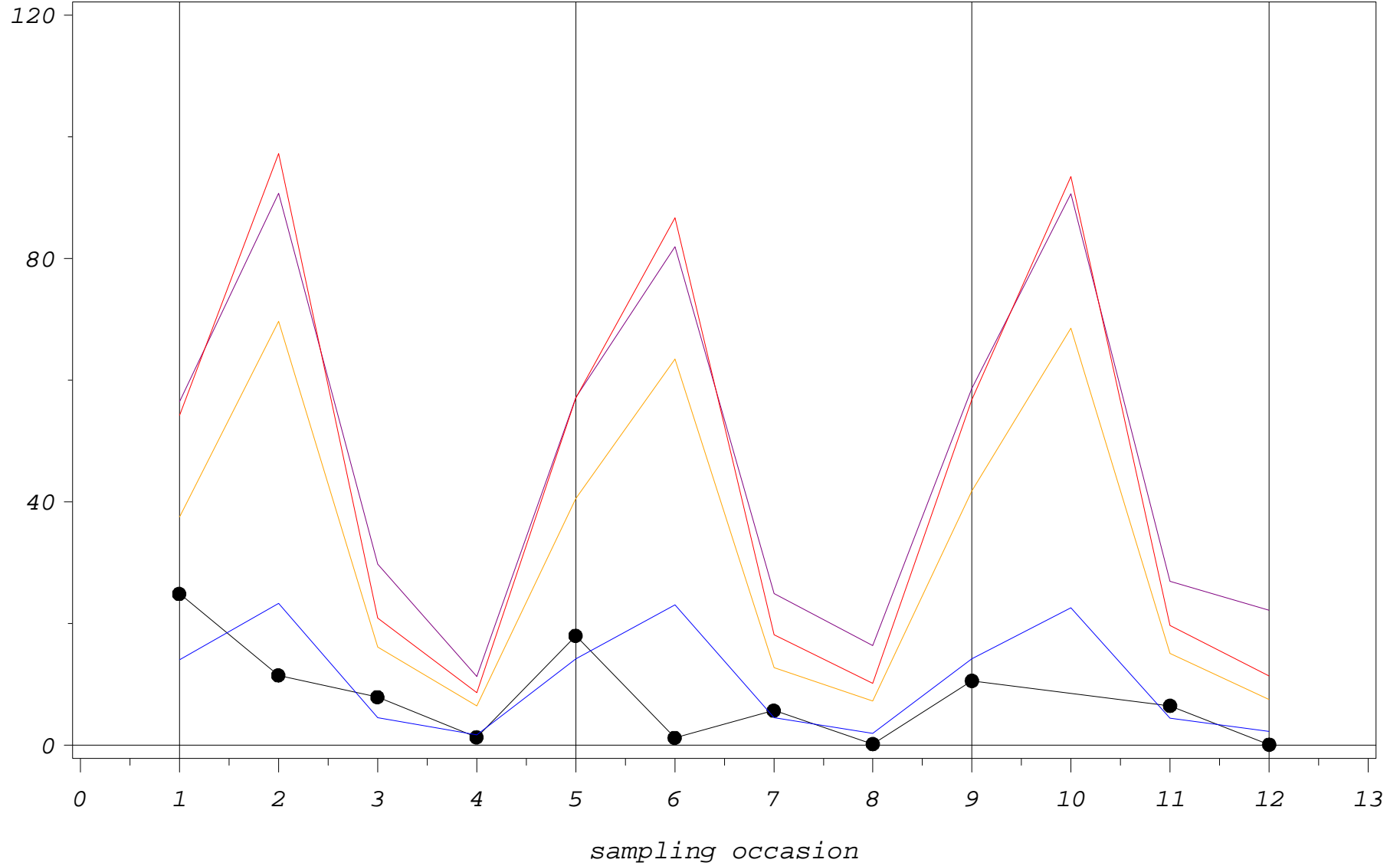
CODE=H03505



Study 2: cortisol single profiles with outlier fences

CODE=H03506

cortisol (nmol/l)



PLOT

●—●—● Cortisol
— Q3+(3*IQR)

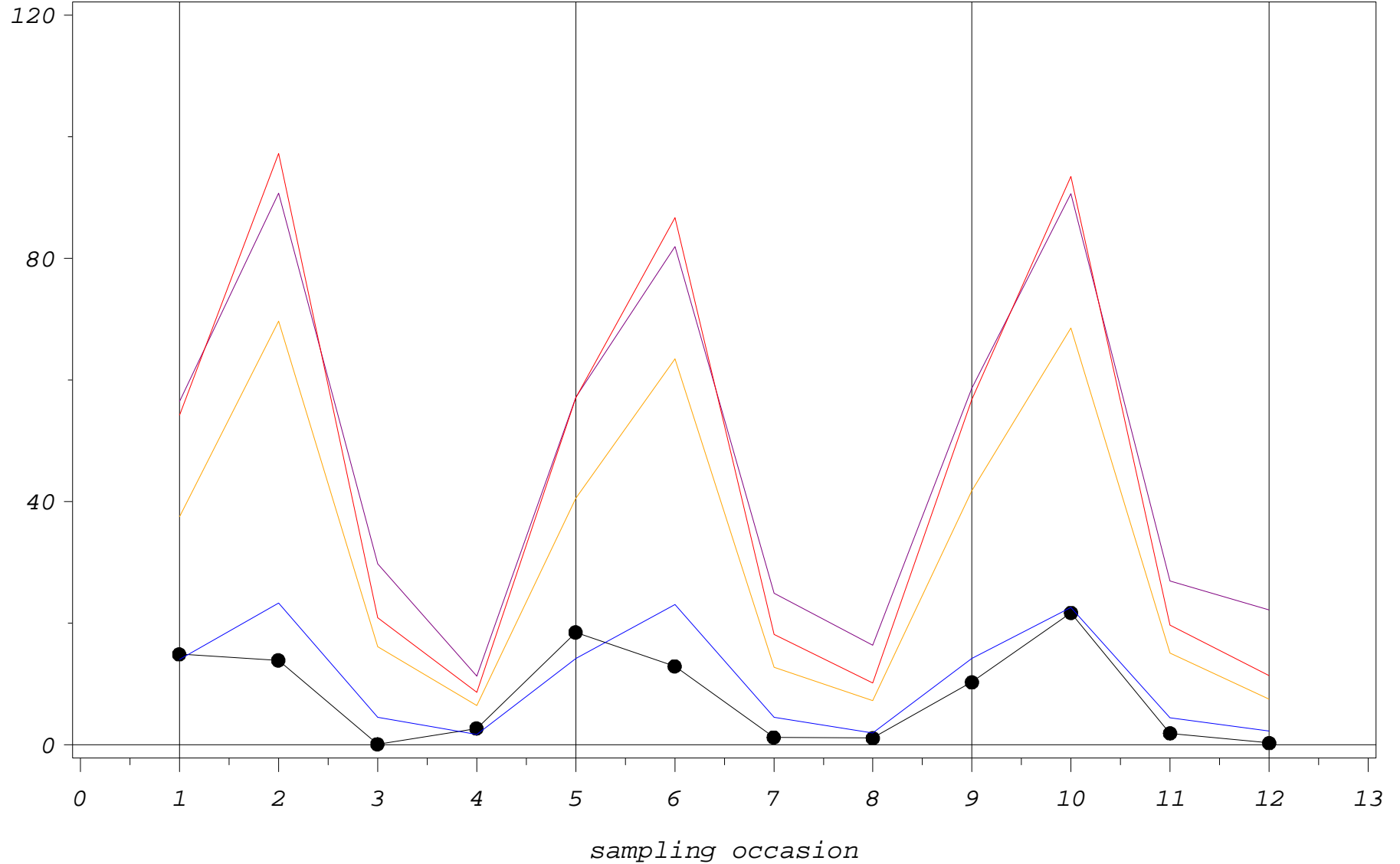
— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03507

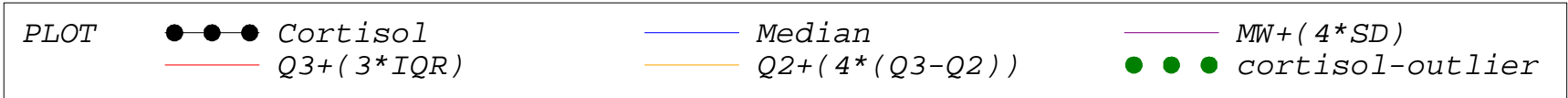
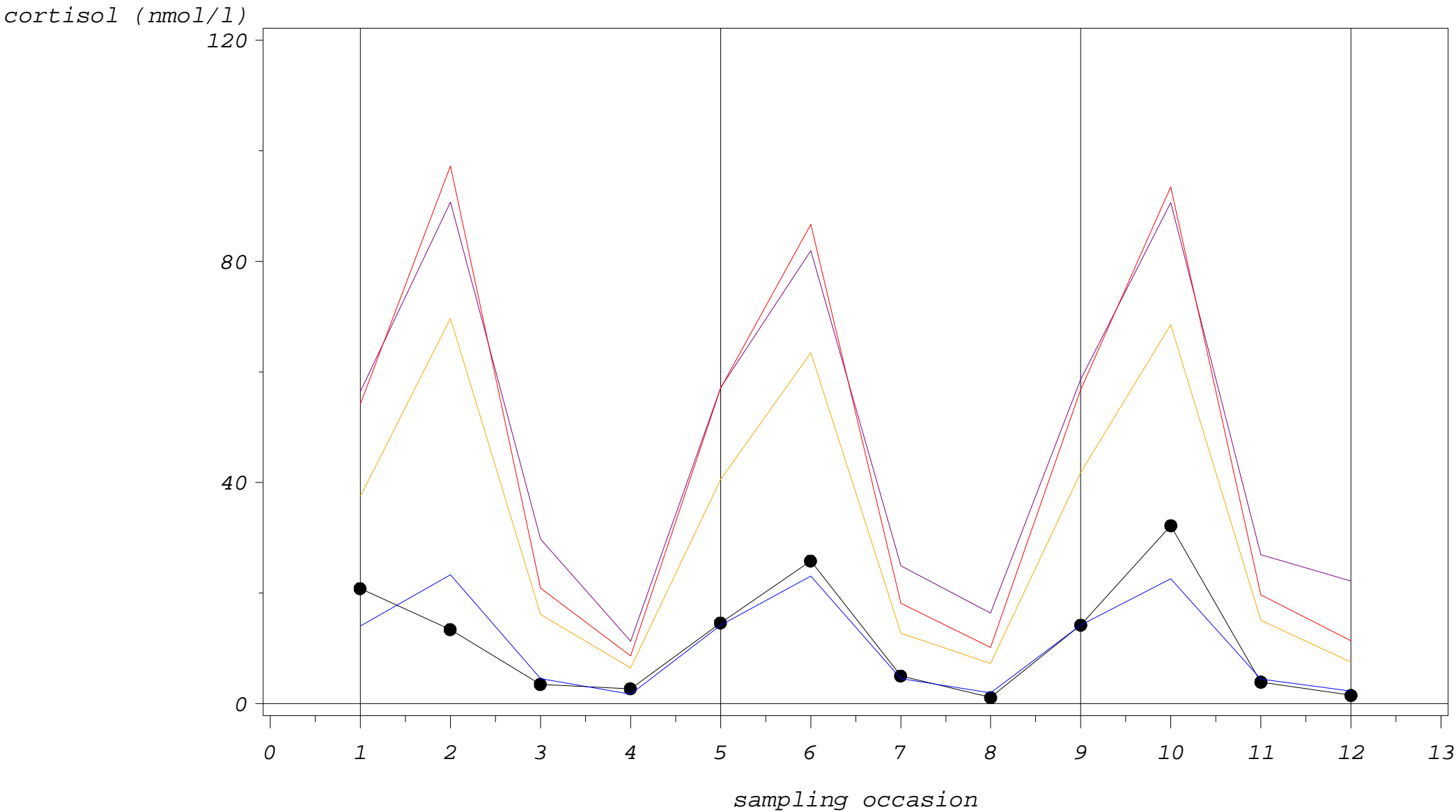
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

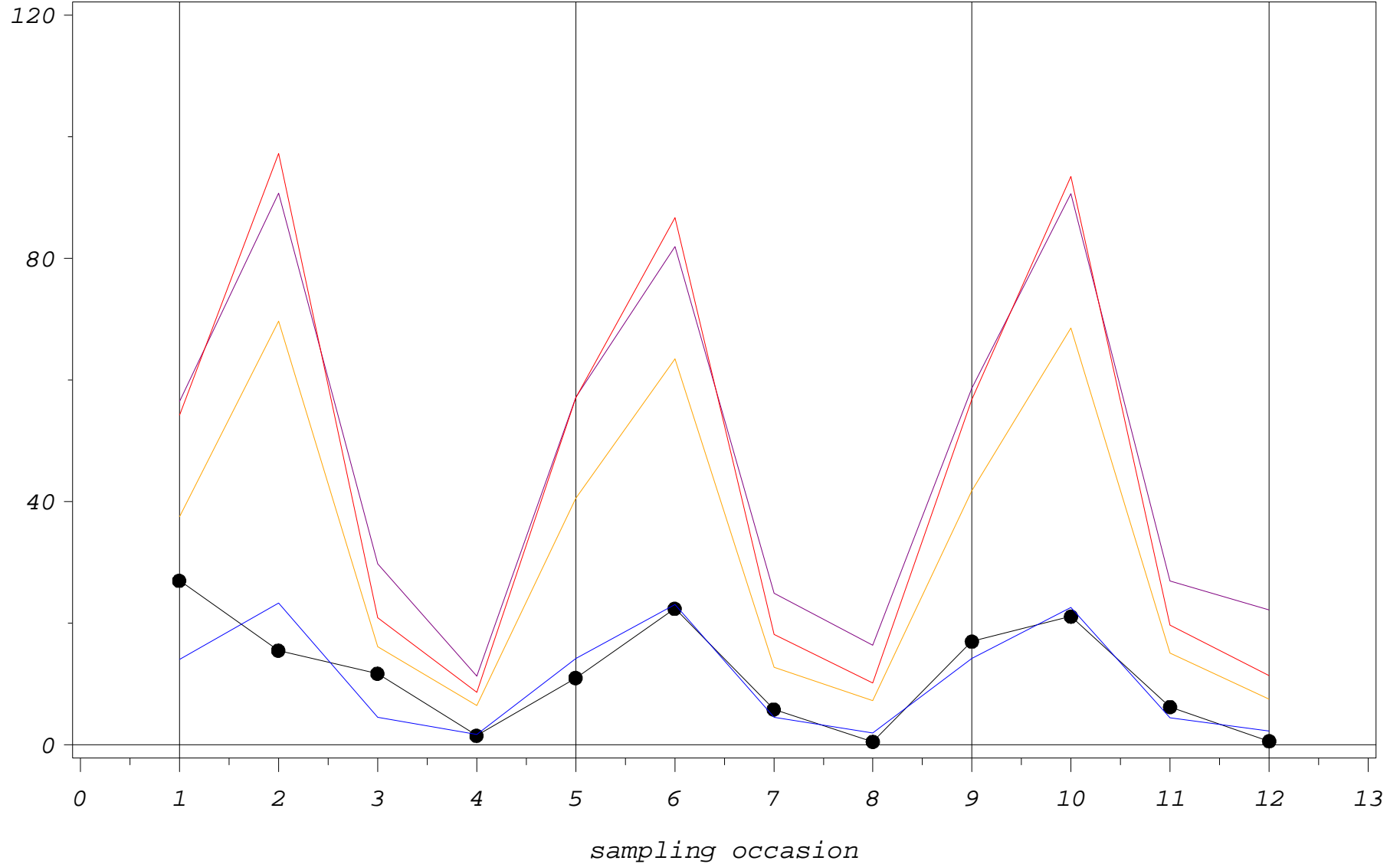
CODE=H03508



Study 2: cortisol single profiles with outlier fences

CODE=H03509

cortisol (nmol/l)



PLOT

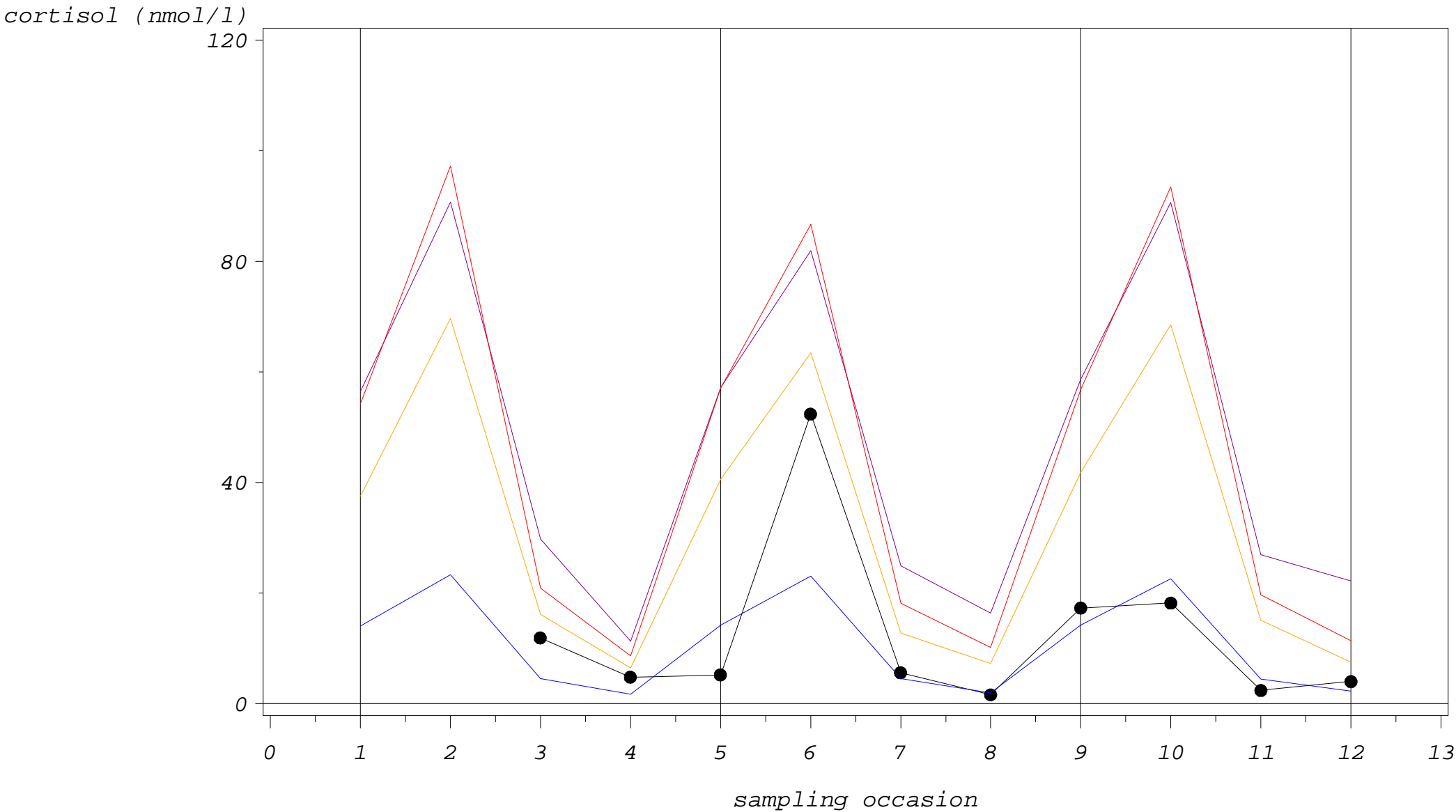
●—●—● Cortisol
— Q3+(3*IQR)

— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

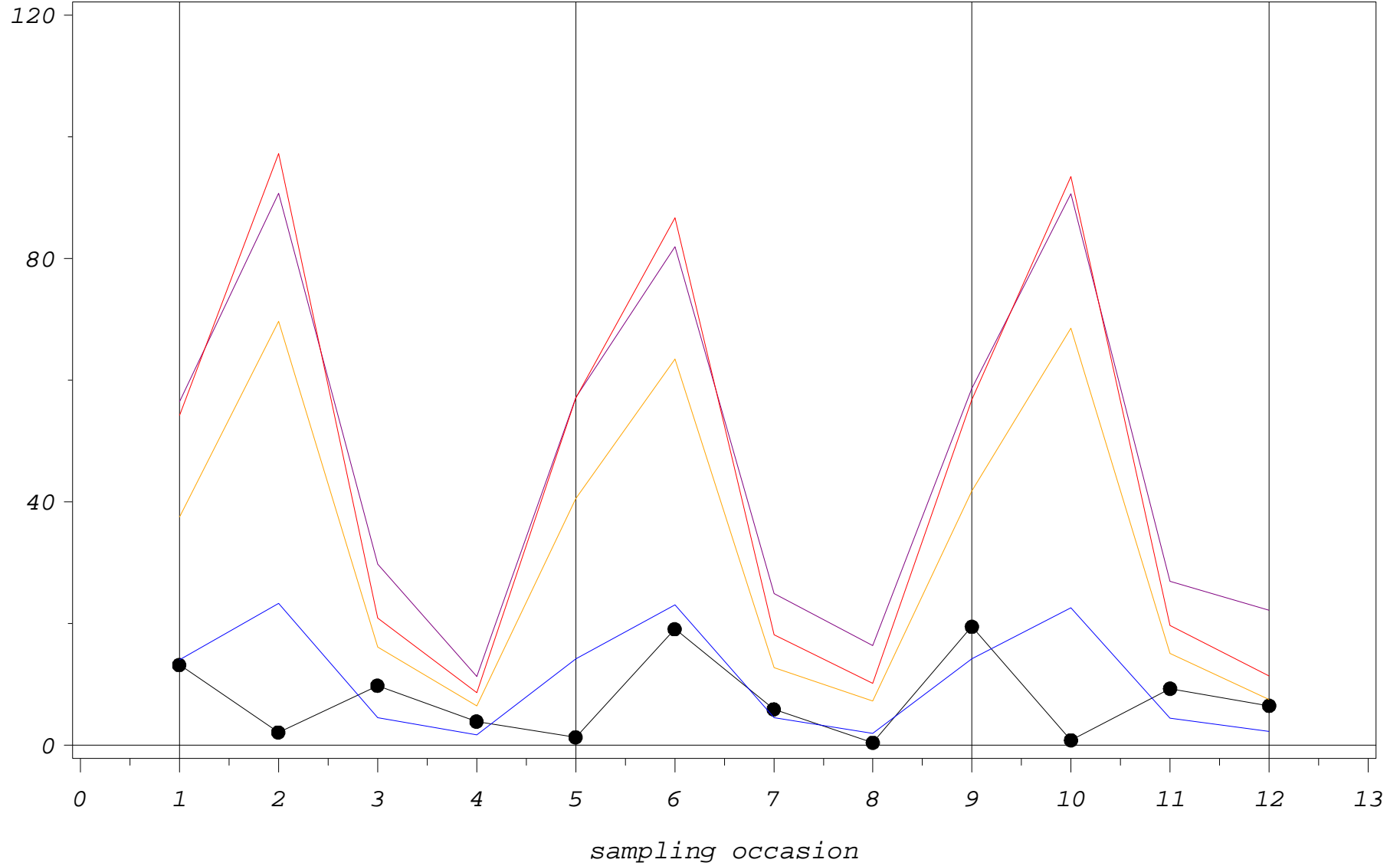
CODE=H03511



Study 2: cortisol single profiles with outlier fences

CODE=H03512

cortisol (nmol/l)

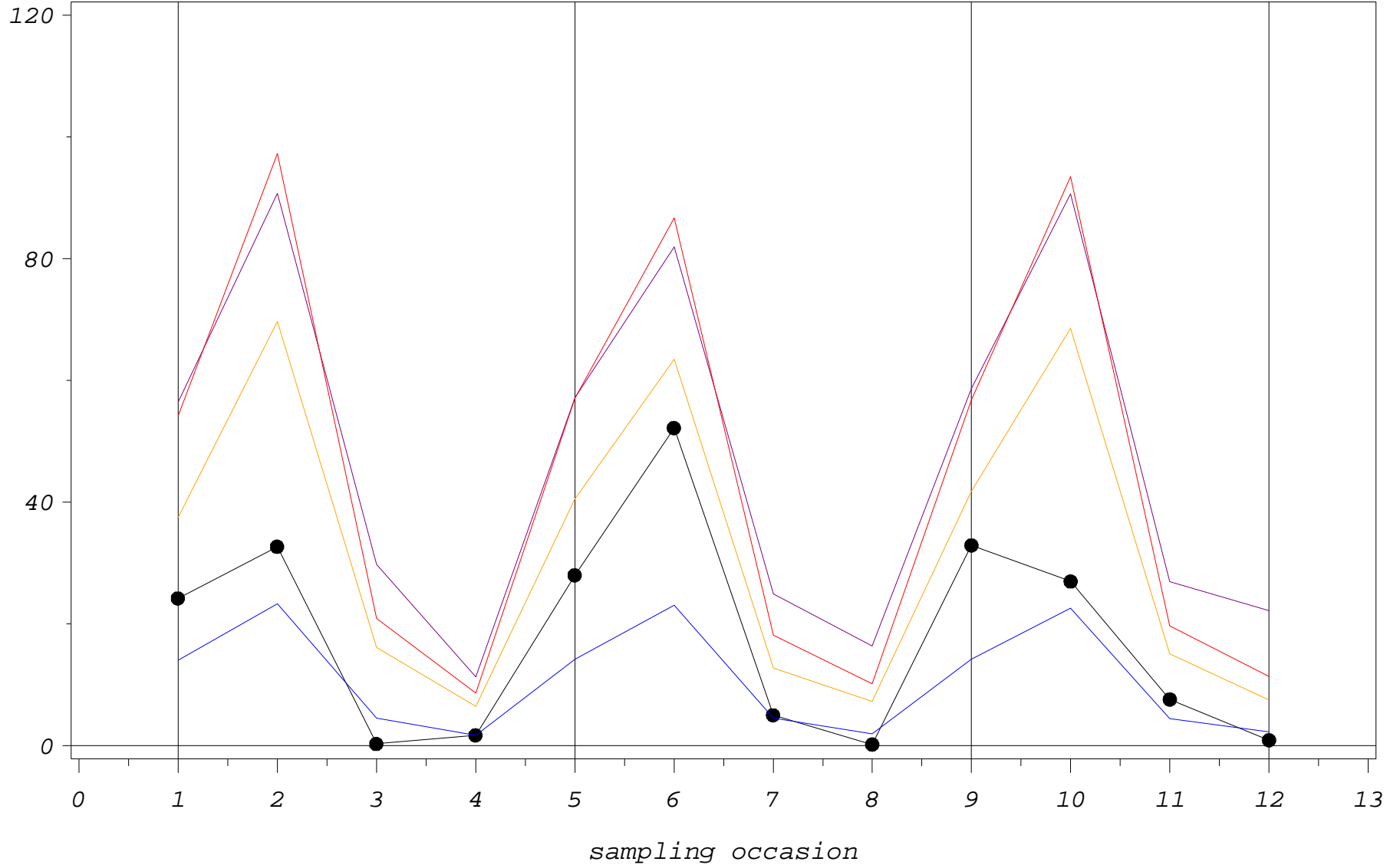


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03601

cortisol (nmol/l)



PLOT

●—● Cortisol
— Q3+(3*IQR)

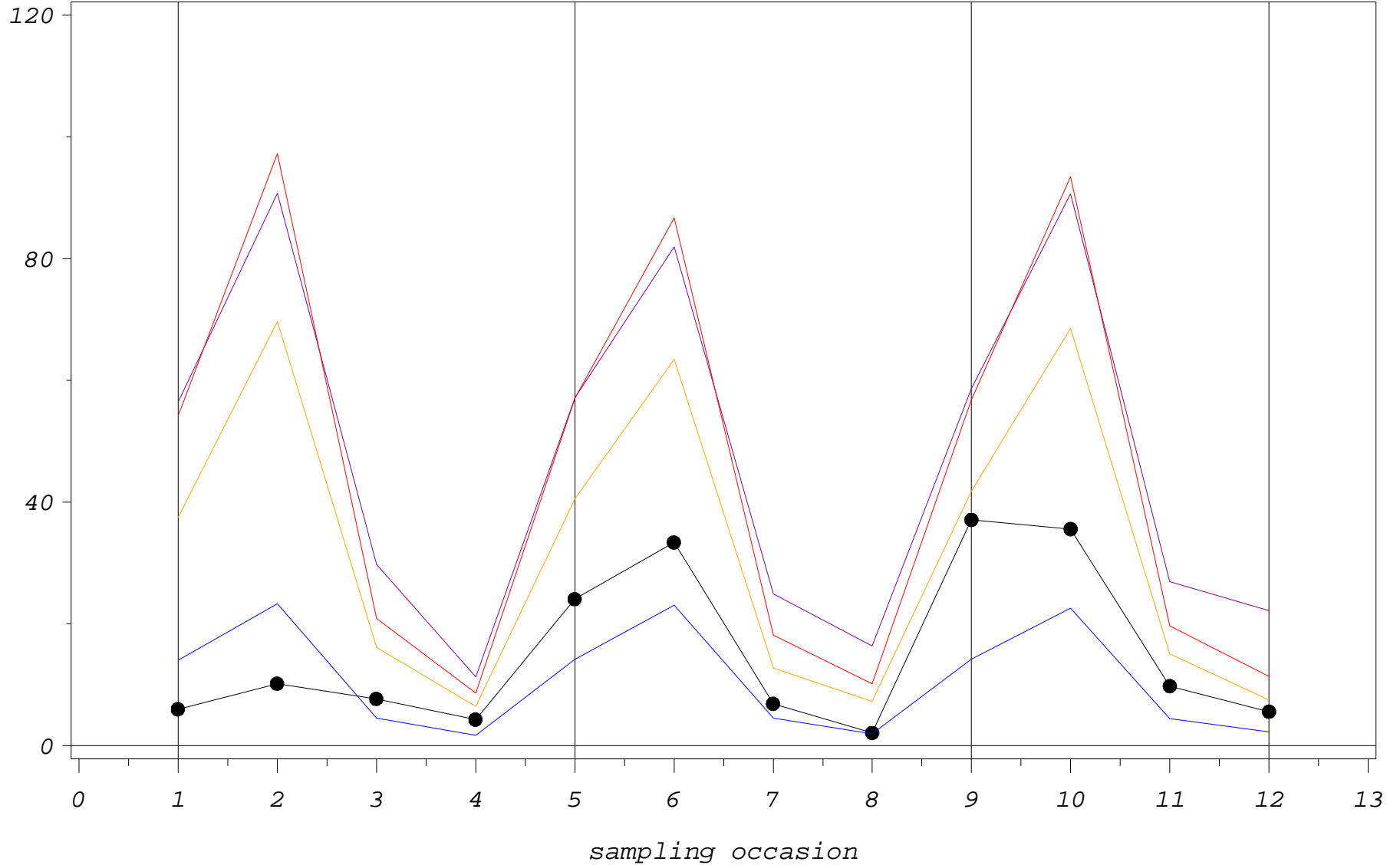
— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
●●● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03602

cortisol (nmol/l)



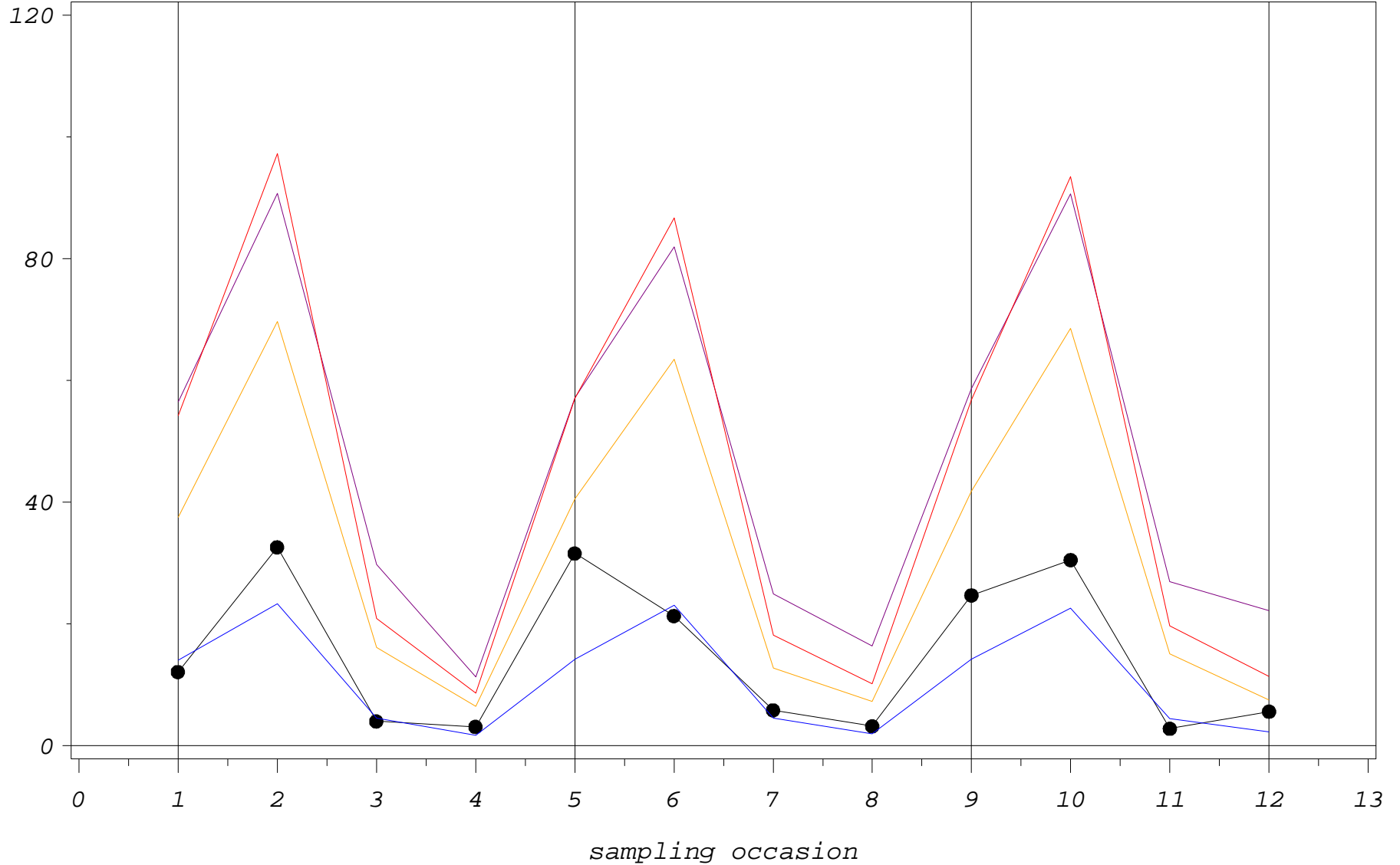
PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03603

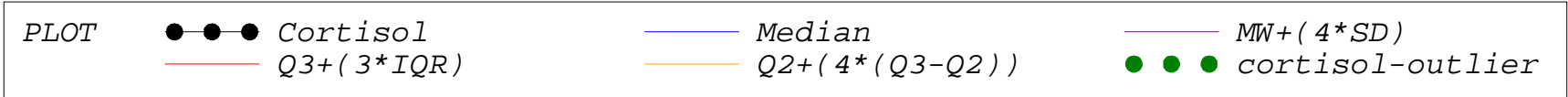
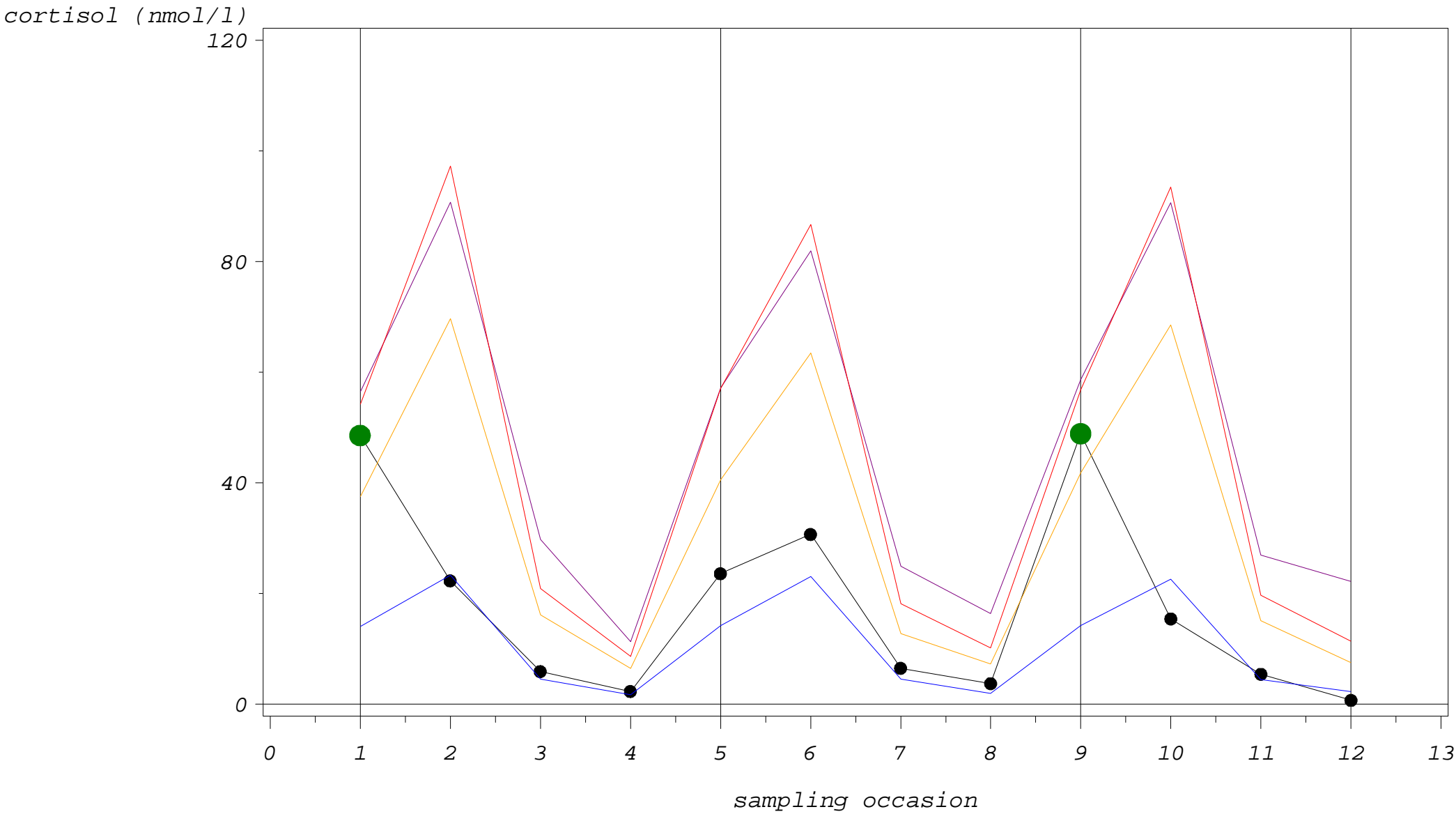
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 * SD)$
 — $Q3 + (3 * IQR)$ — $Q2 + (4 * (Q3 - Q2))$ ● ● ● cortisol-outlier

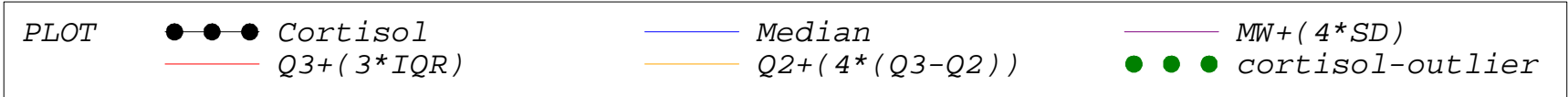
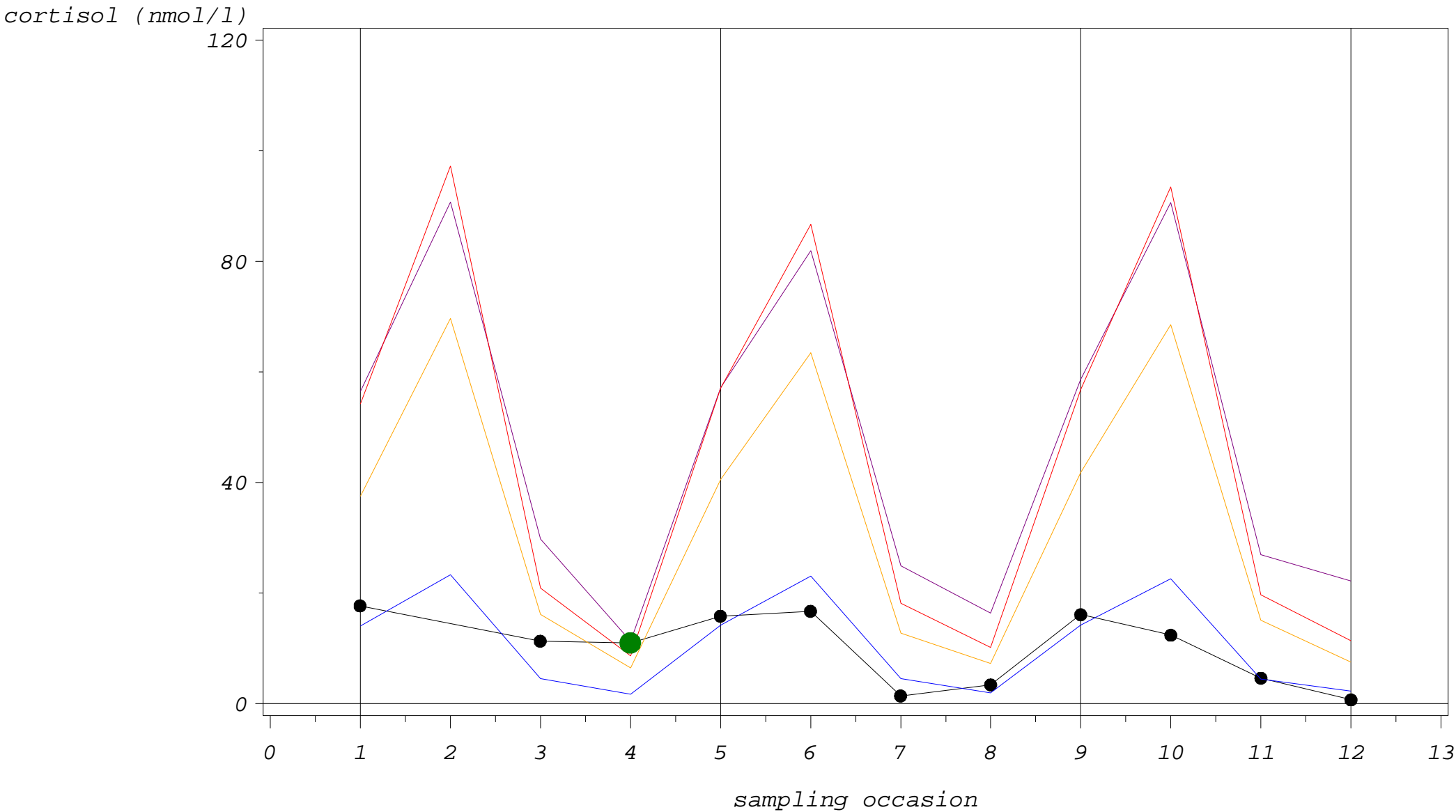
Study 2: cortisol single profiles with outlier fences

CODE=H03604



Study 2: cortisol single profiles with outlier fences

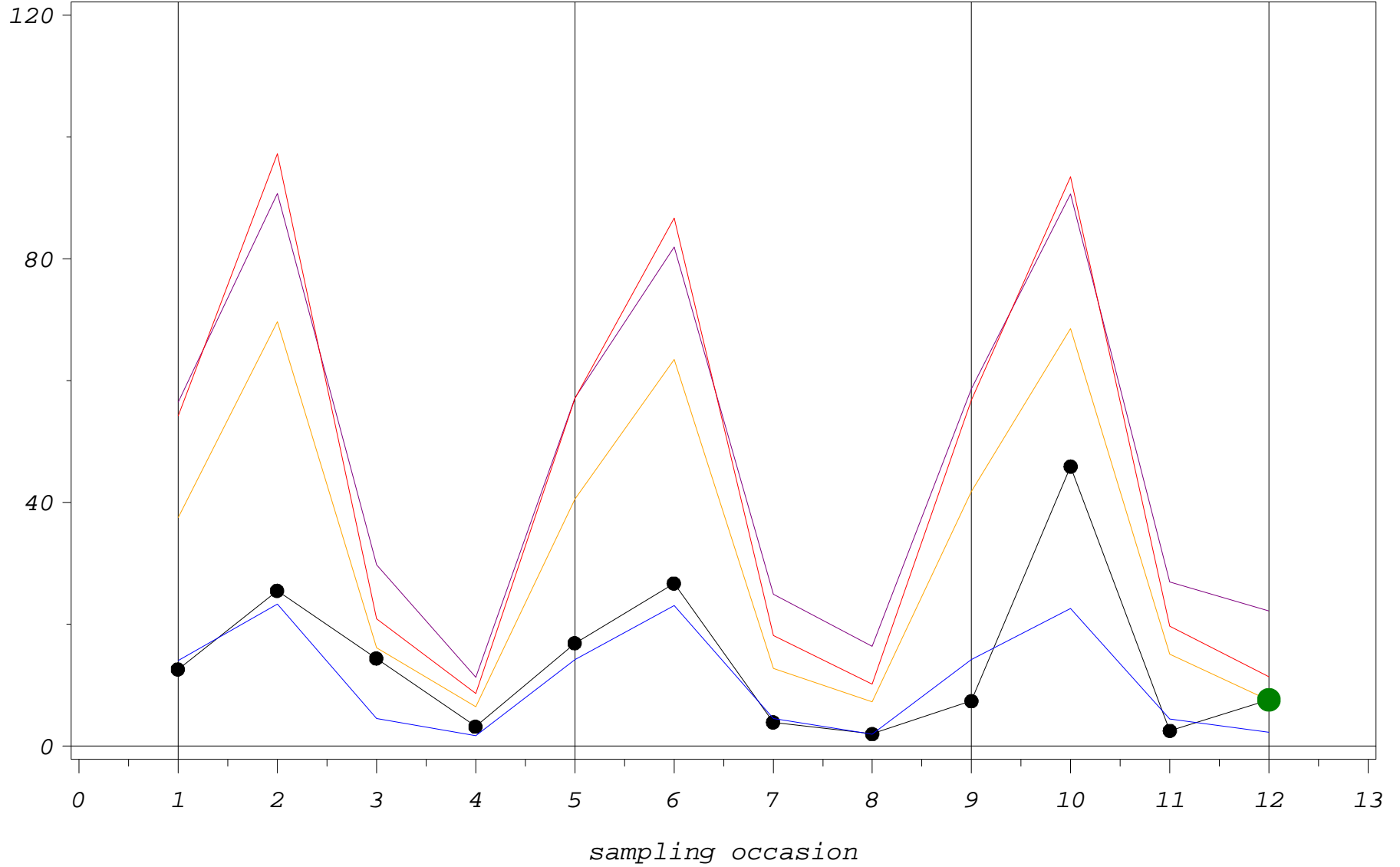
CODE=H03701



Study 2: cortisol single profiles with outlier fences

CODE=H03703

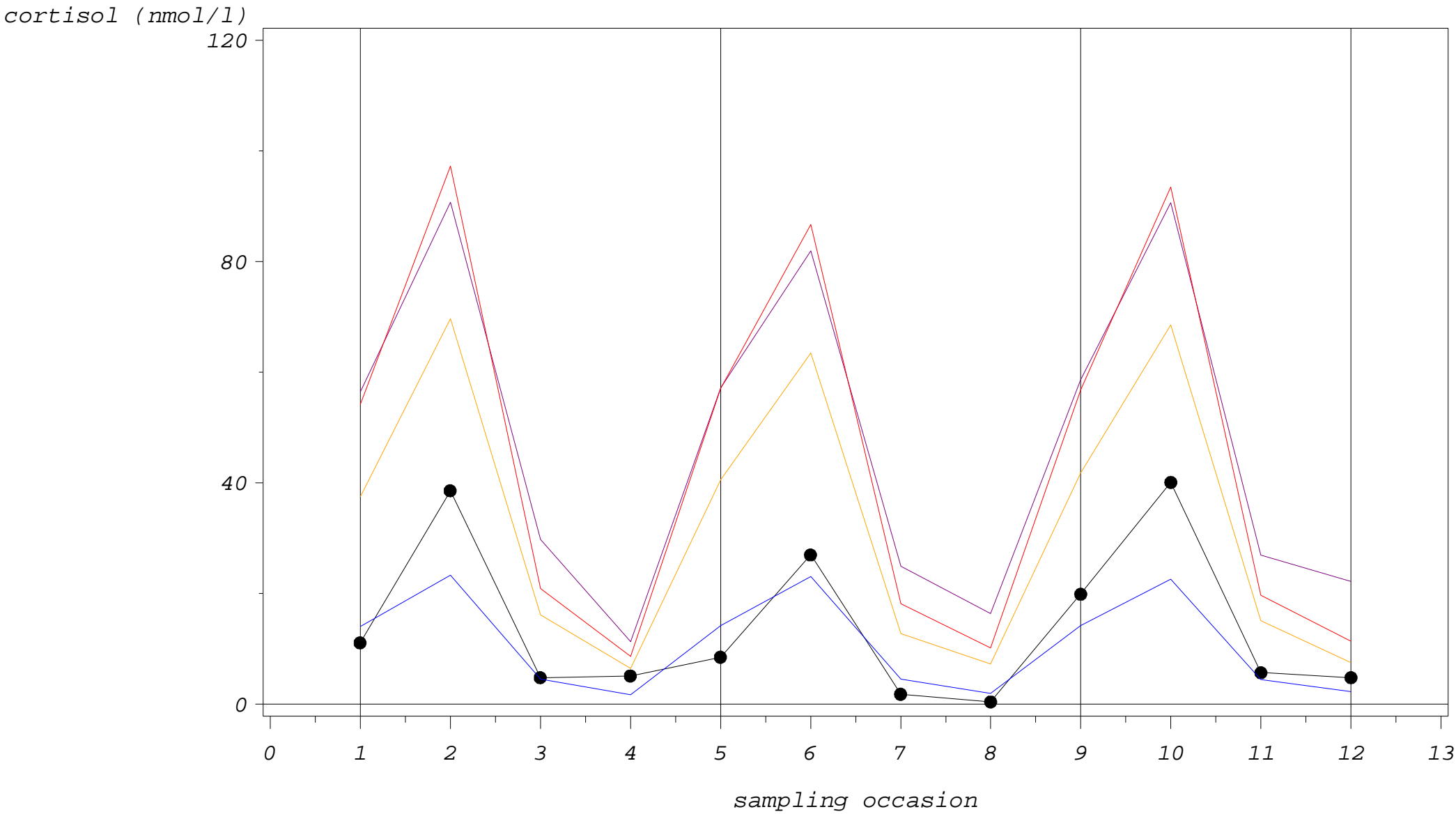
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

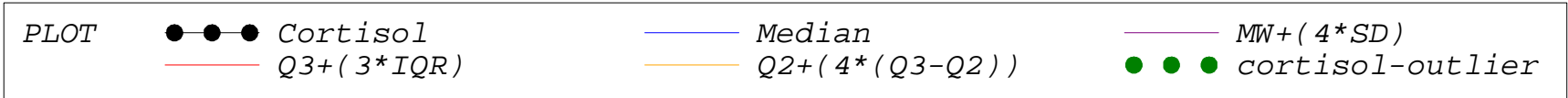
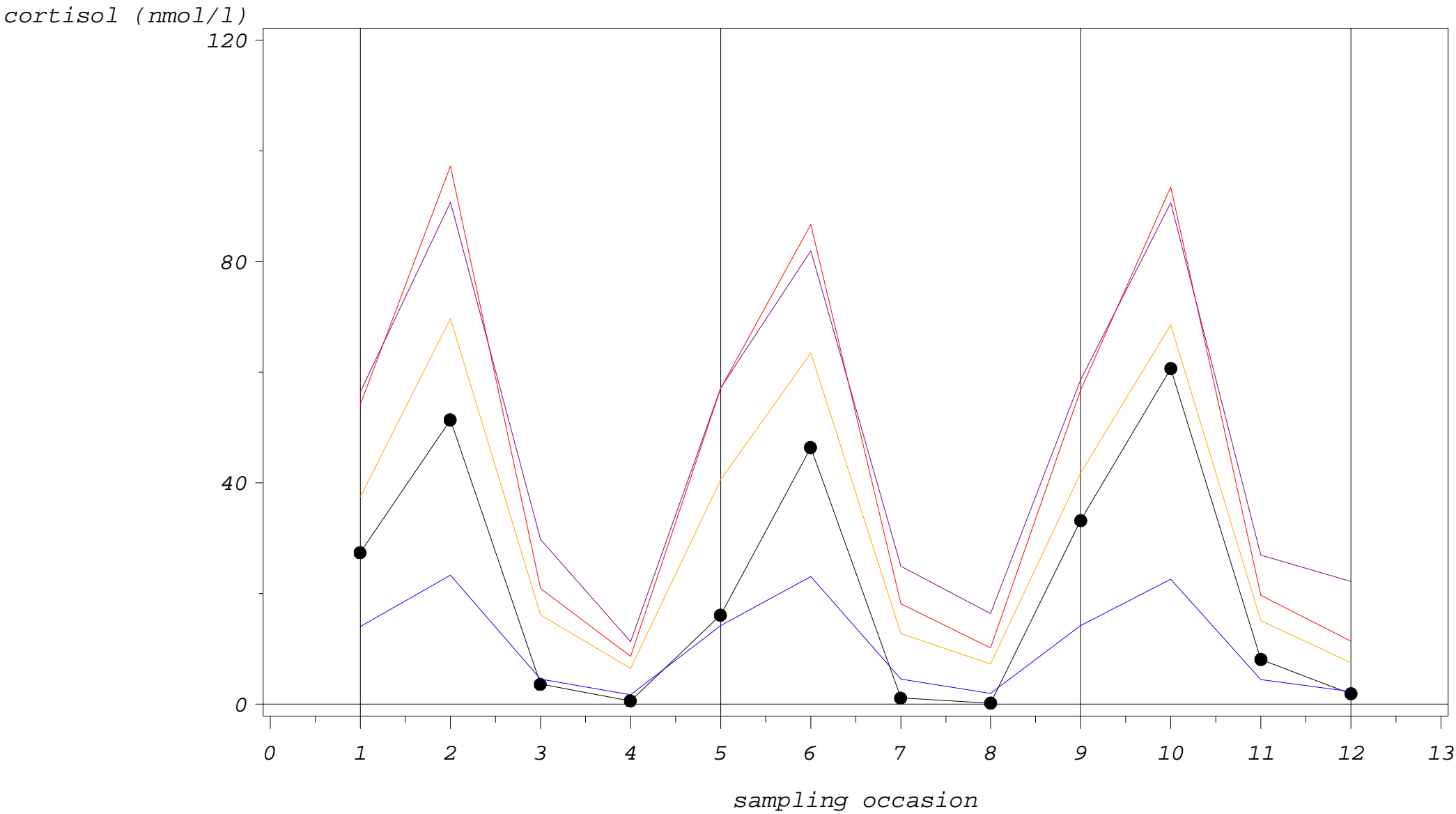
Study 2: cortisol single profiles with outlier fences

CODE=H03704



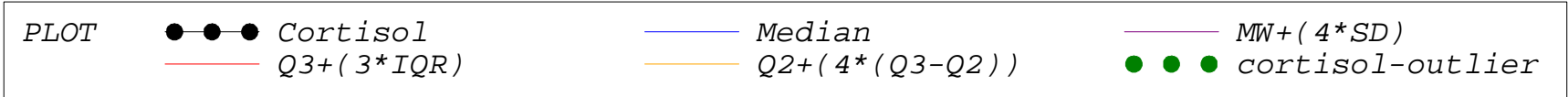
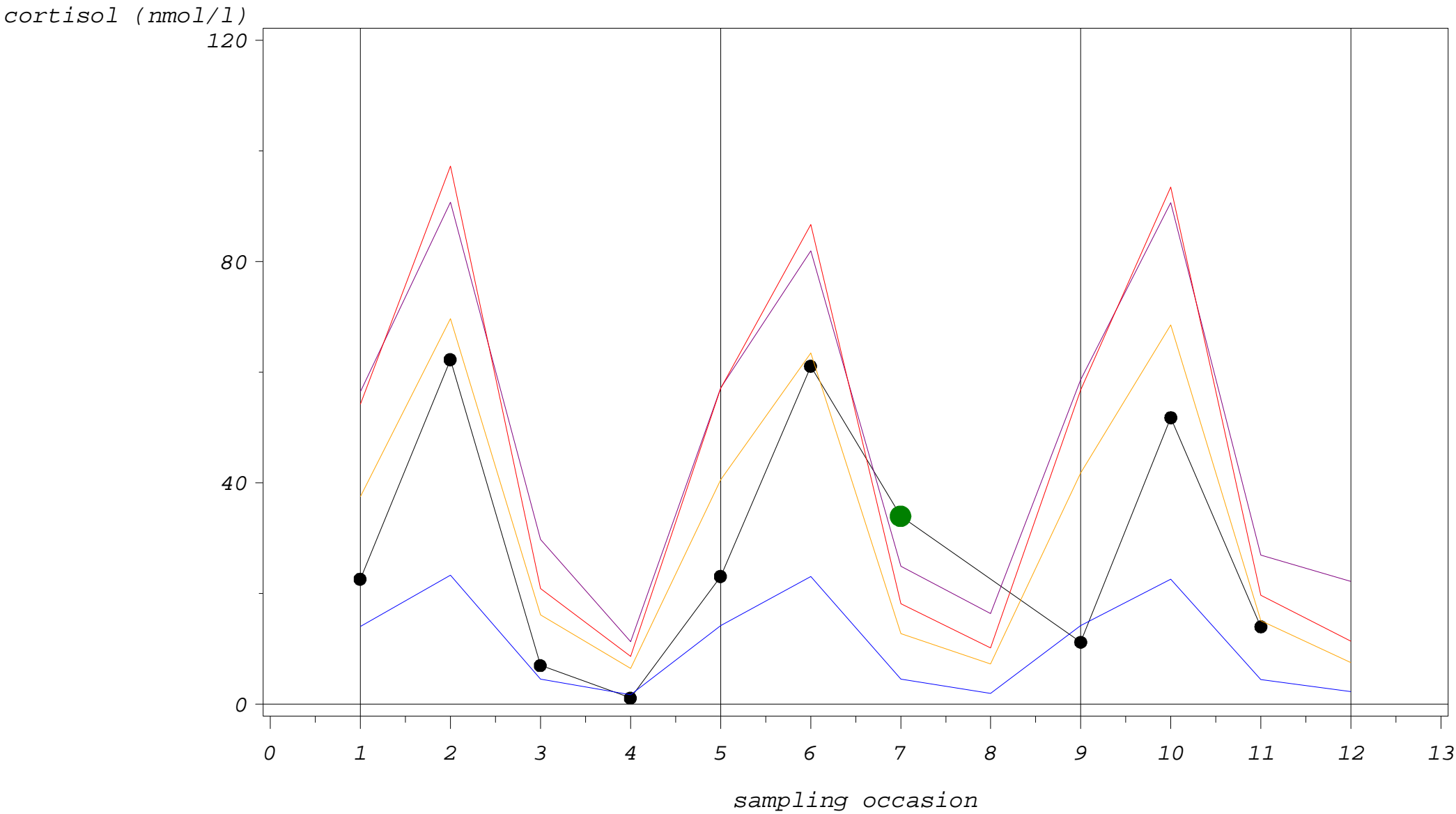
Study 2: cortisol single profiles with outlier fences

CODE=H03705



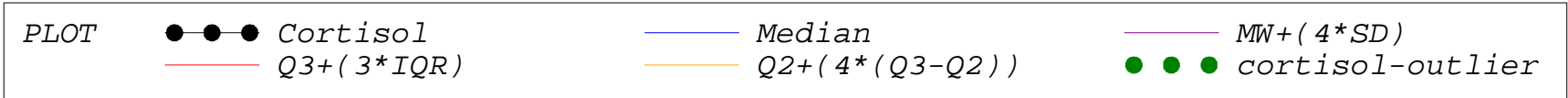
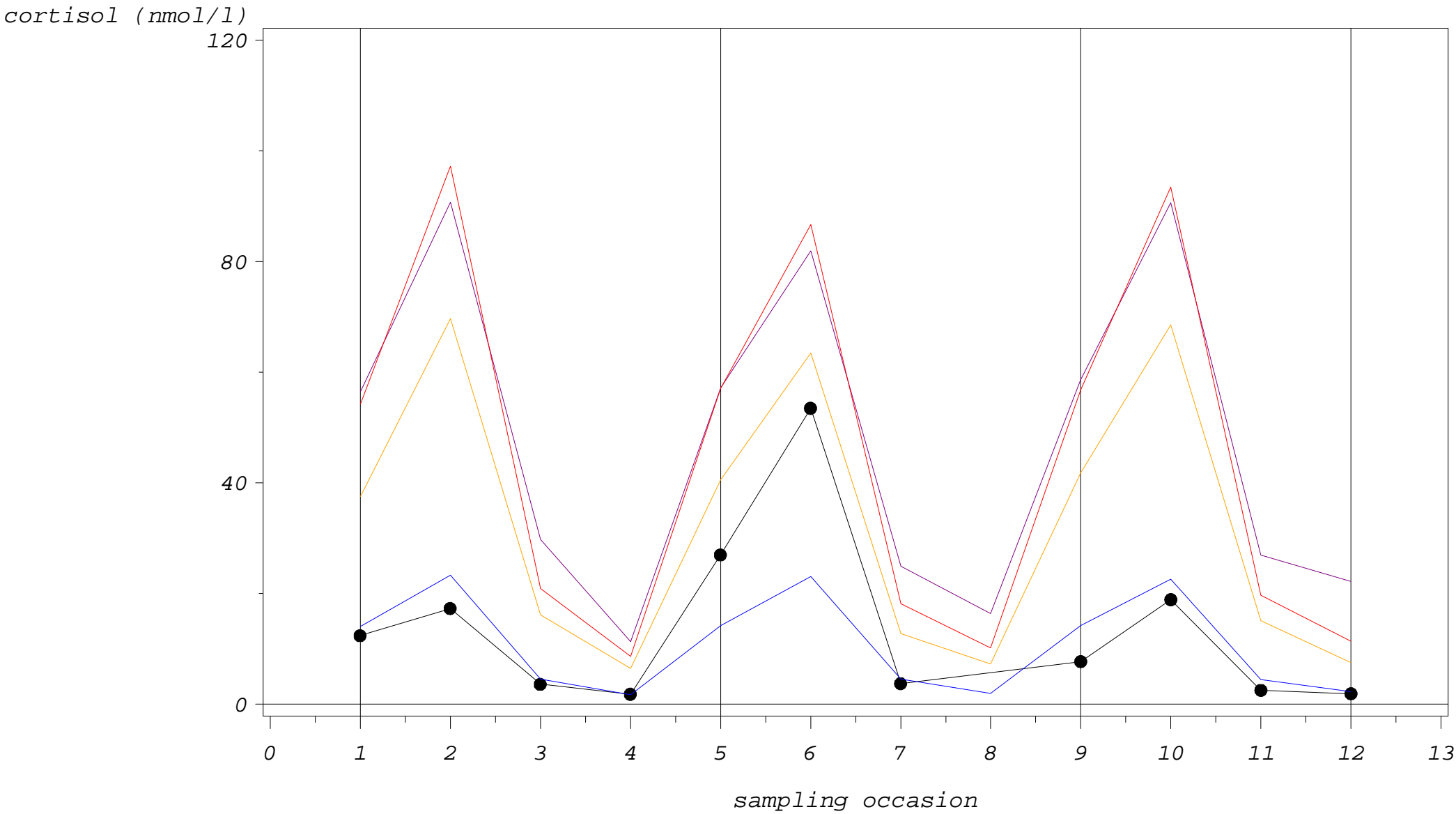
Study 2: cortisol single profiles with outlier fences

CODE=H03706



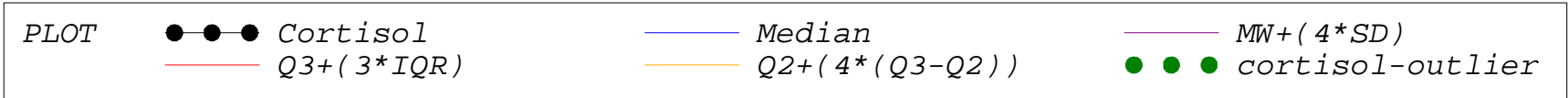
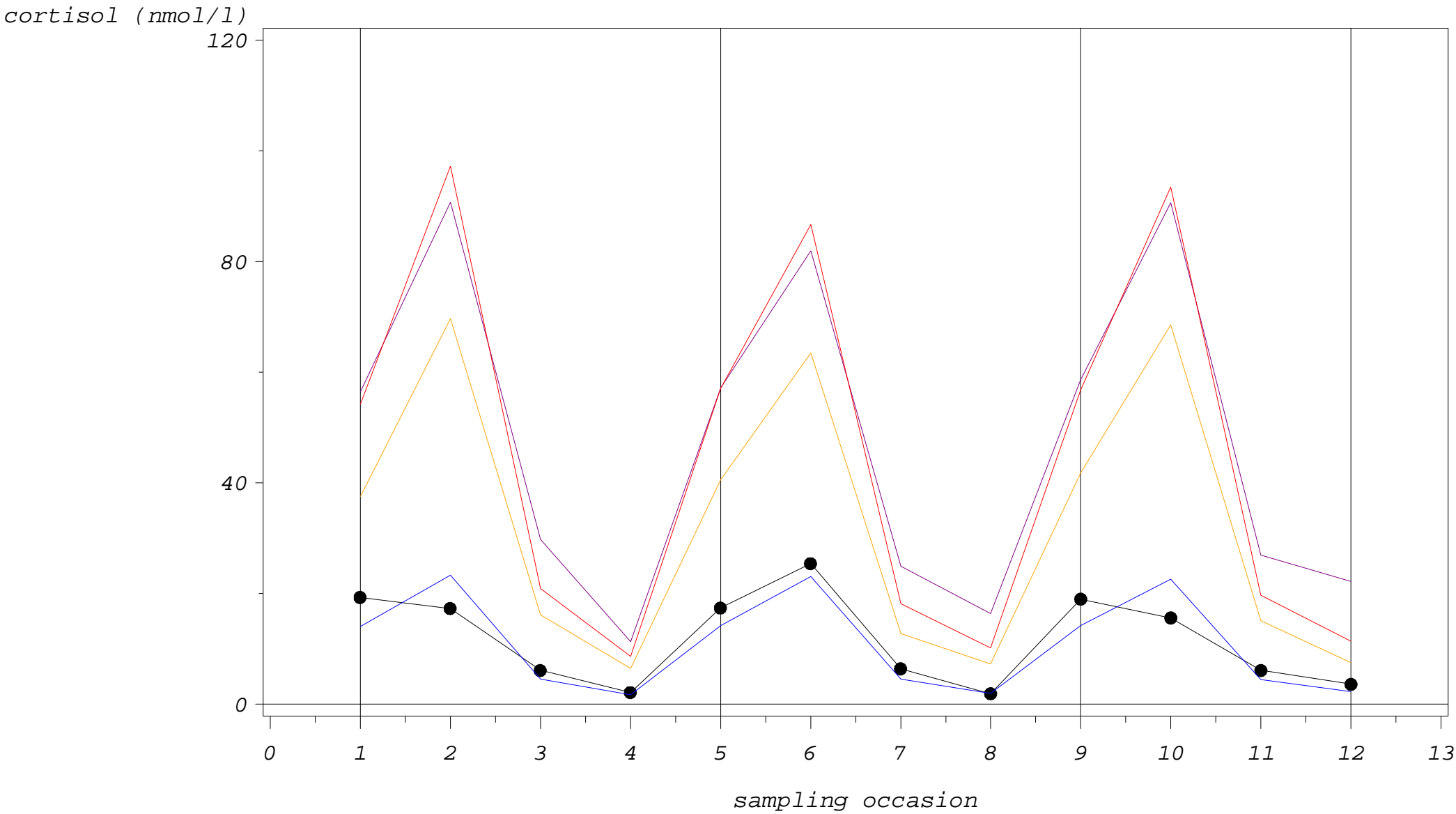
Study 2: cortisol single profiles with outlier fences

CODE=H03707



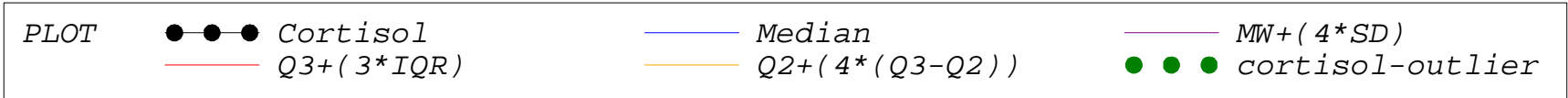
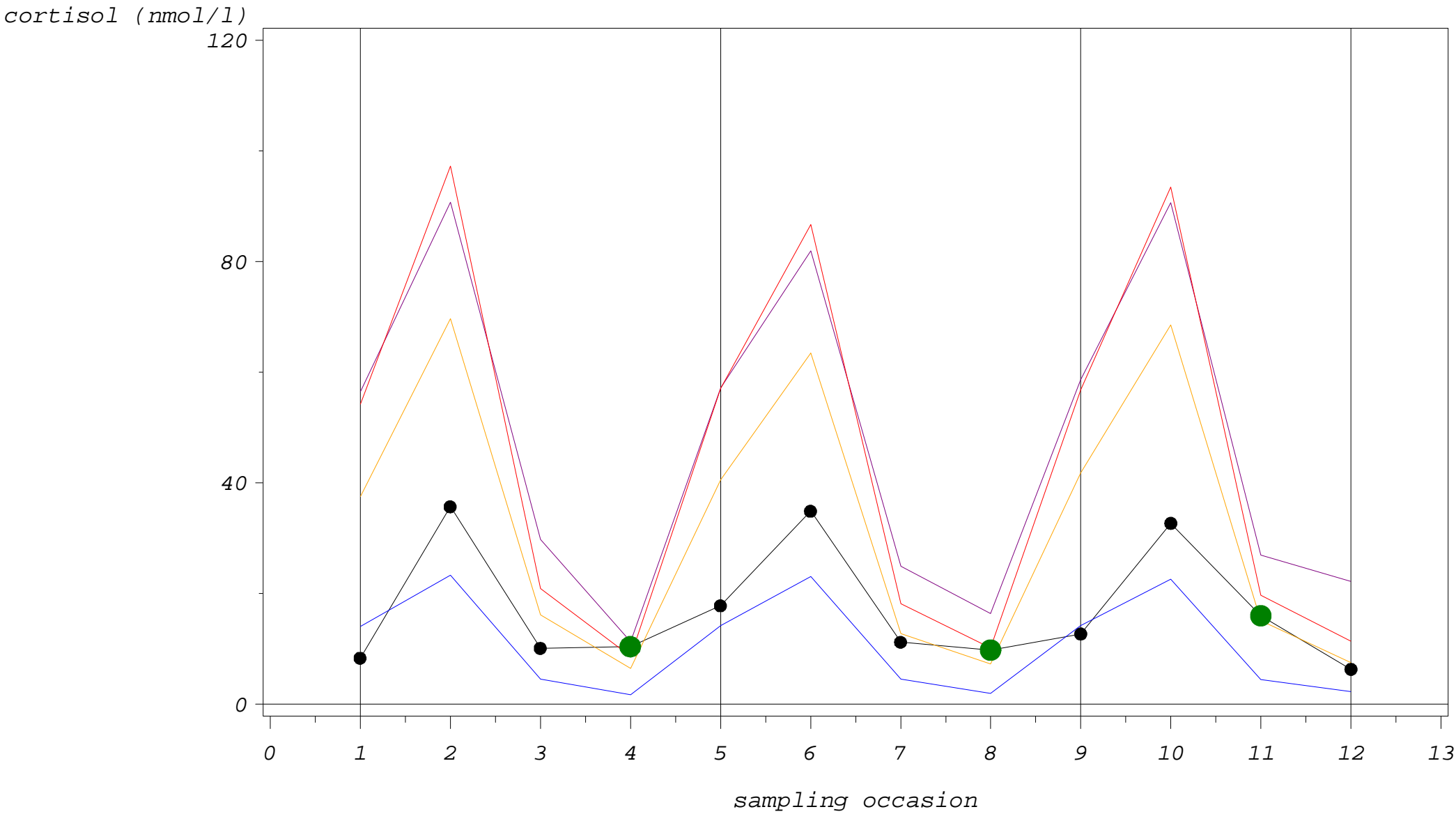
Study 2: cortisol single profiles with outlier fences

CODE=H03708



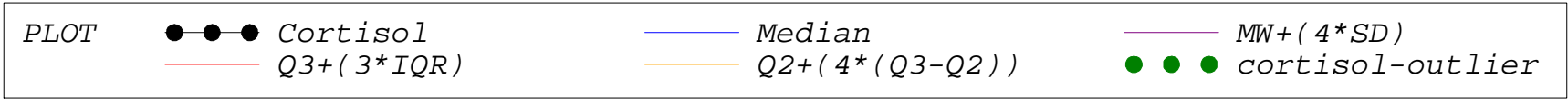
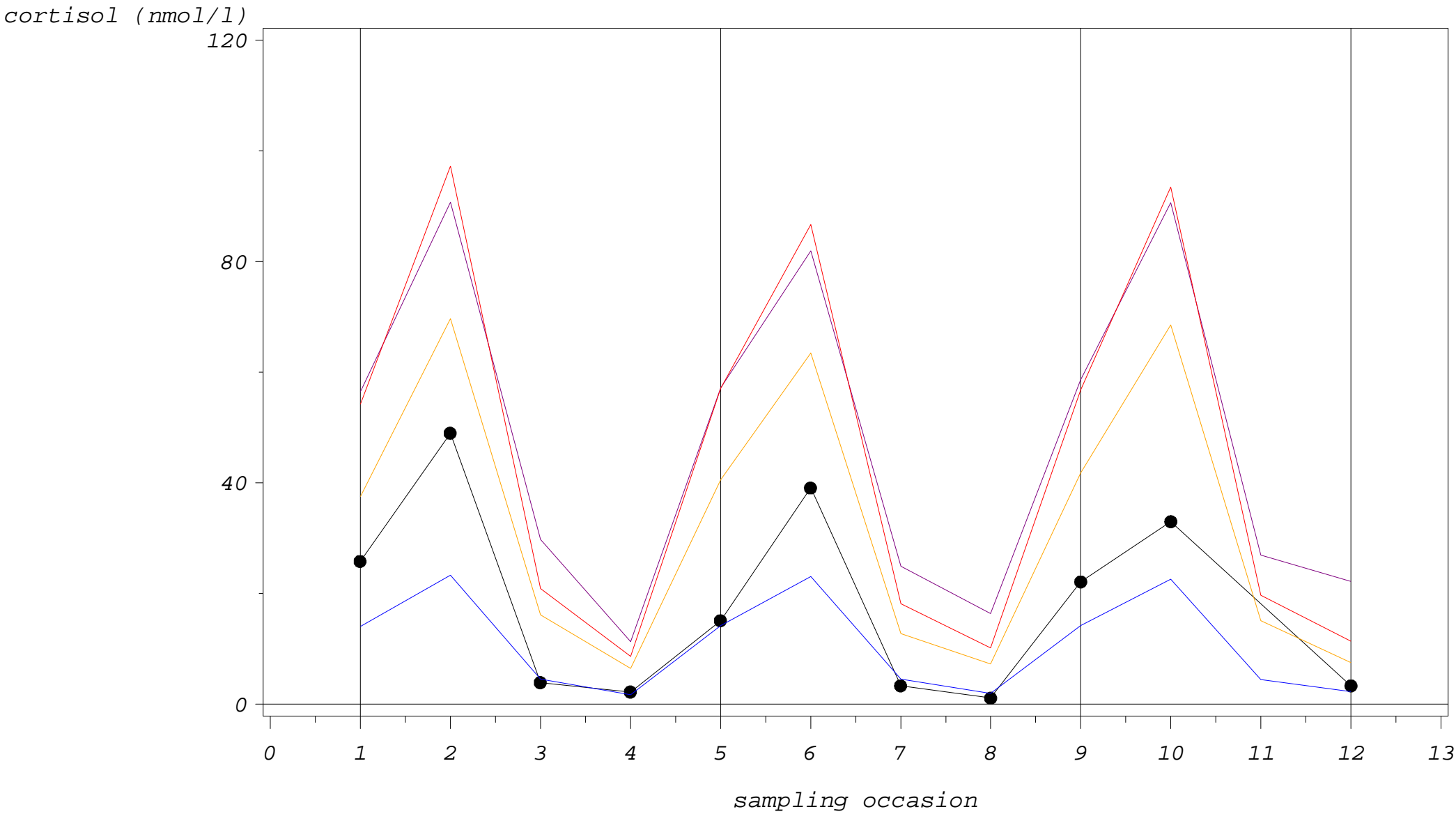
Study 2: cortisol single profiles with outlier fences

CODE=H03709



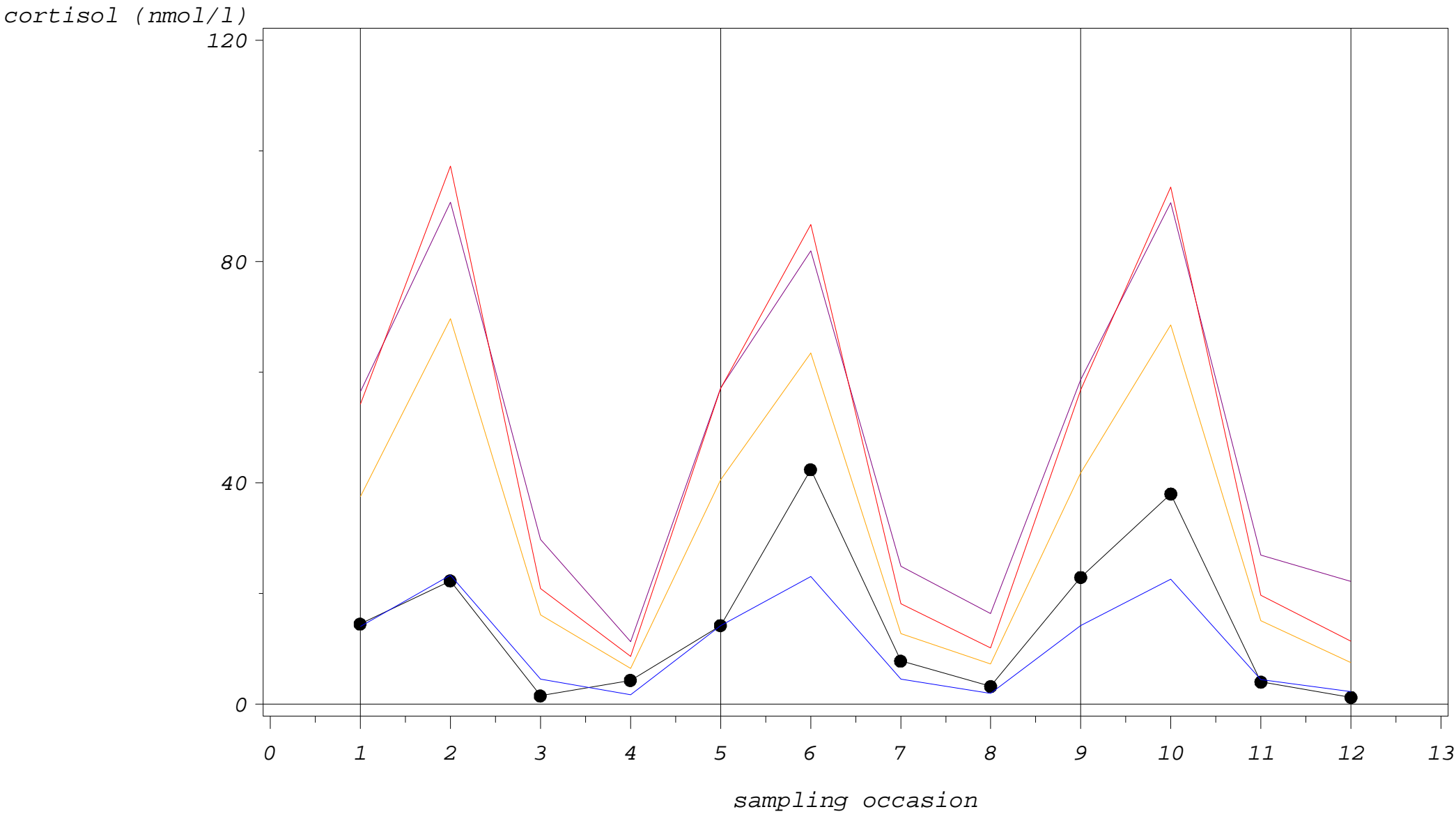
Study 2: cortisol single profiles with outlier fences

CODE=H03710



Study 2: cortisol single profiles with outlier fences

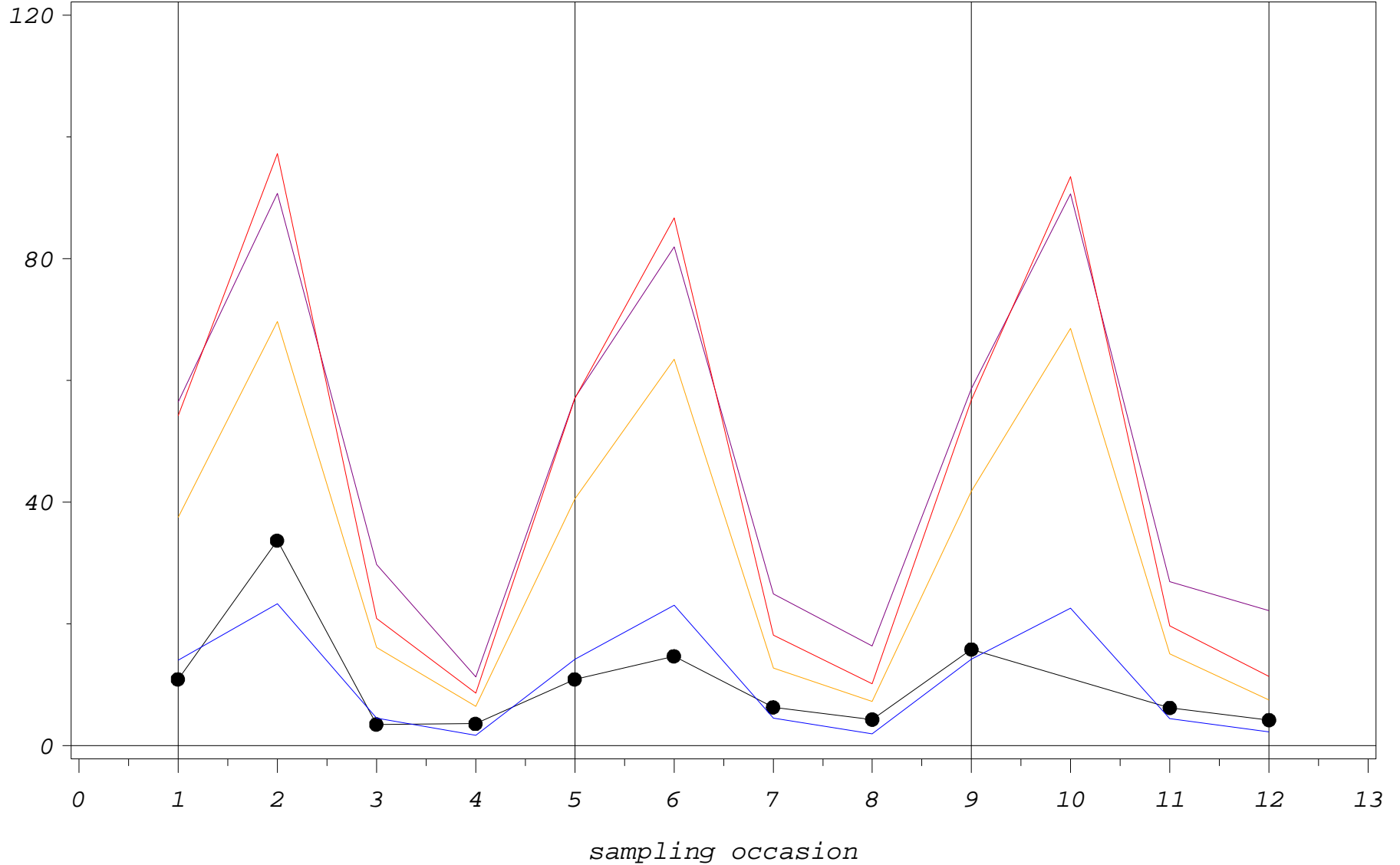
CODE=H03711



Study 2: cortisol single profiles with outlier fences

CODE=H03801

cortisol (nmol/l)

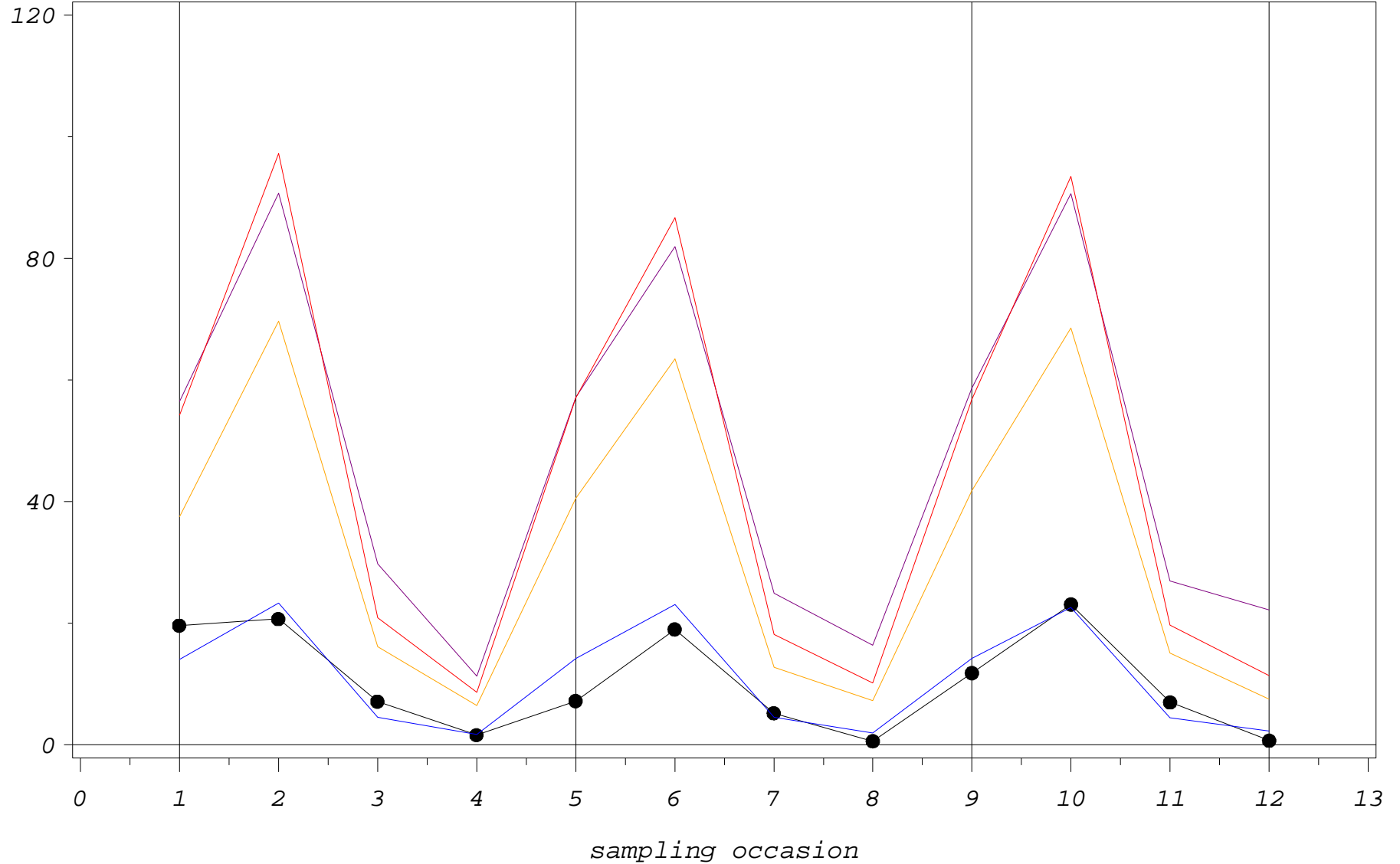


PLOT	●—●—● Cortisol	— Median	— MW+(4*SD)
	— Q3+(3*IQR)	— Q2+(4*(Q3-Q2))	● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03802

cortisol (nmol/l)

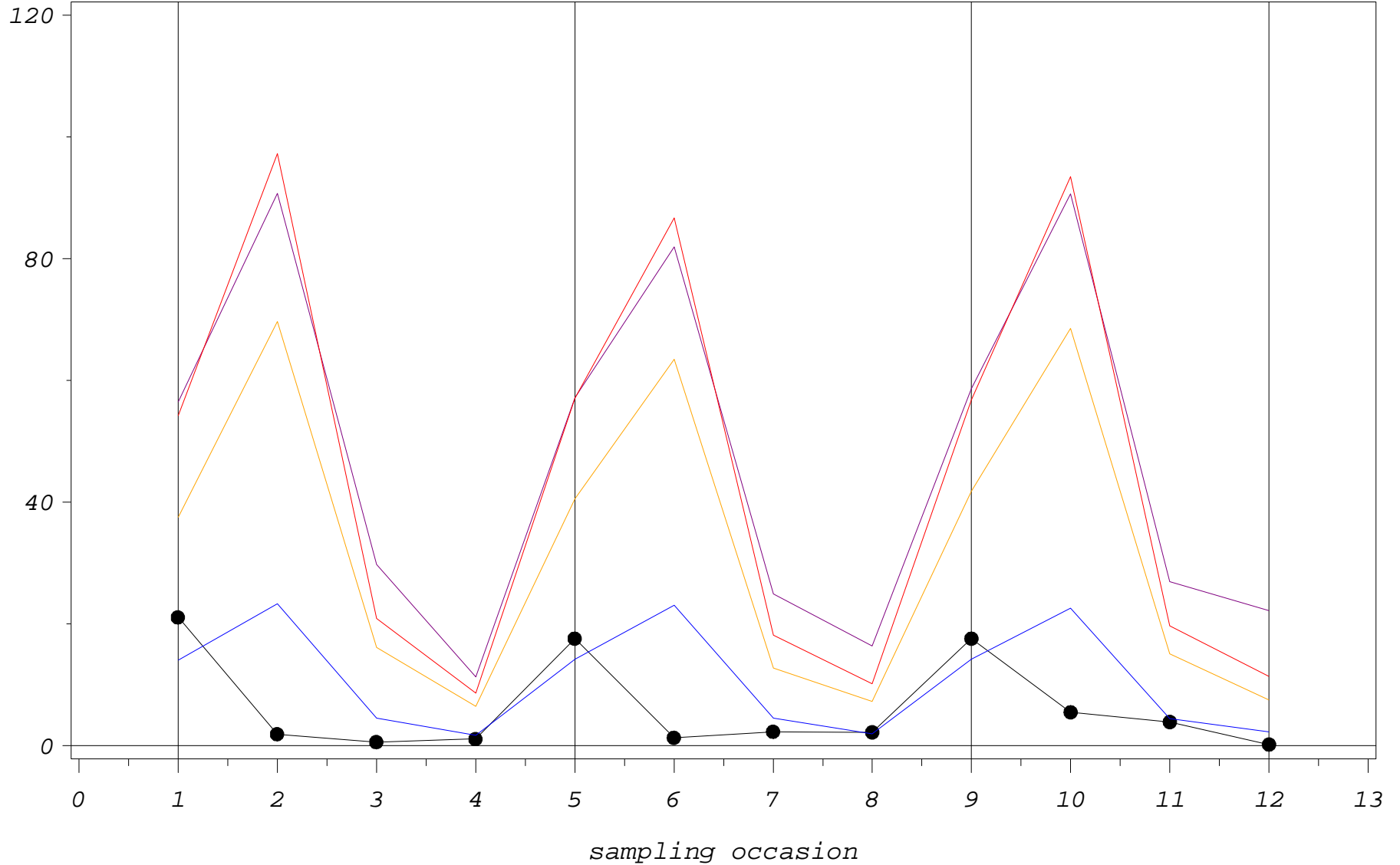


PLOT ●—●—● Cortisol — Median — $MW + (4 \times SD)$
 — $Q3 + (3 \times IQR)$ — $Q2 + (4 \times (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03803

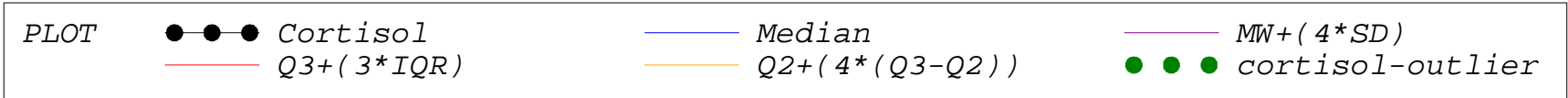
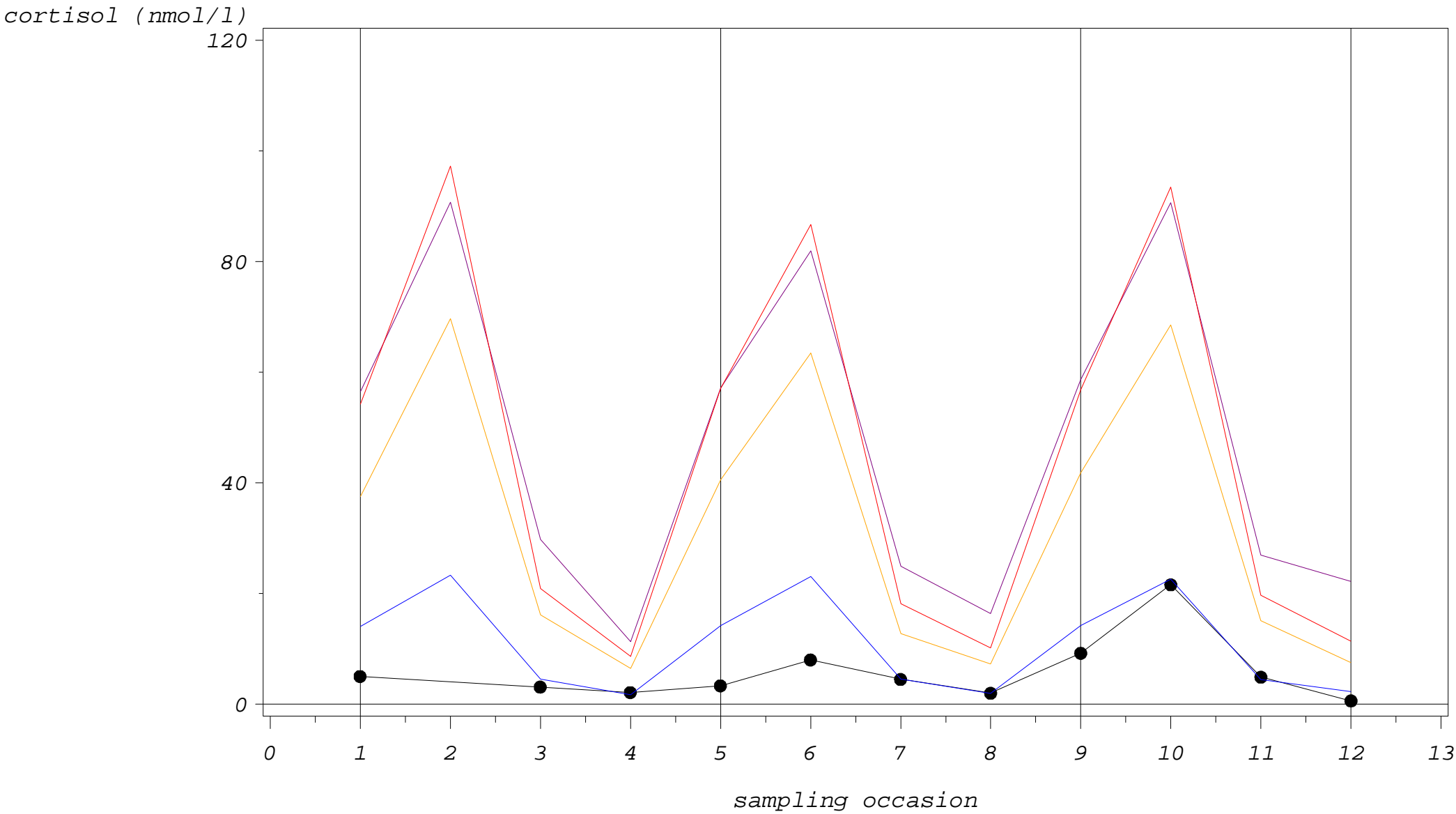
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

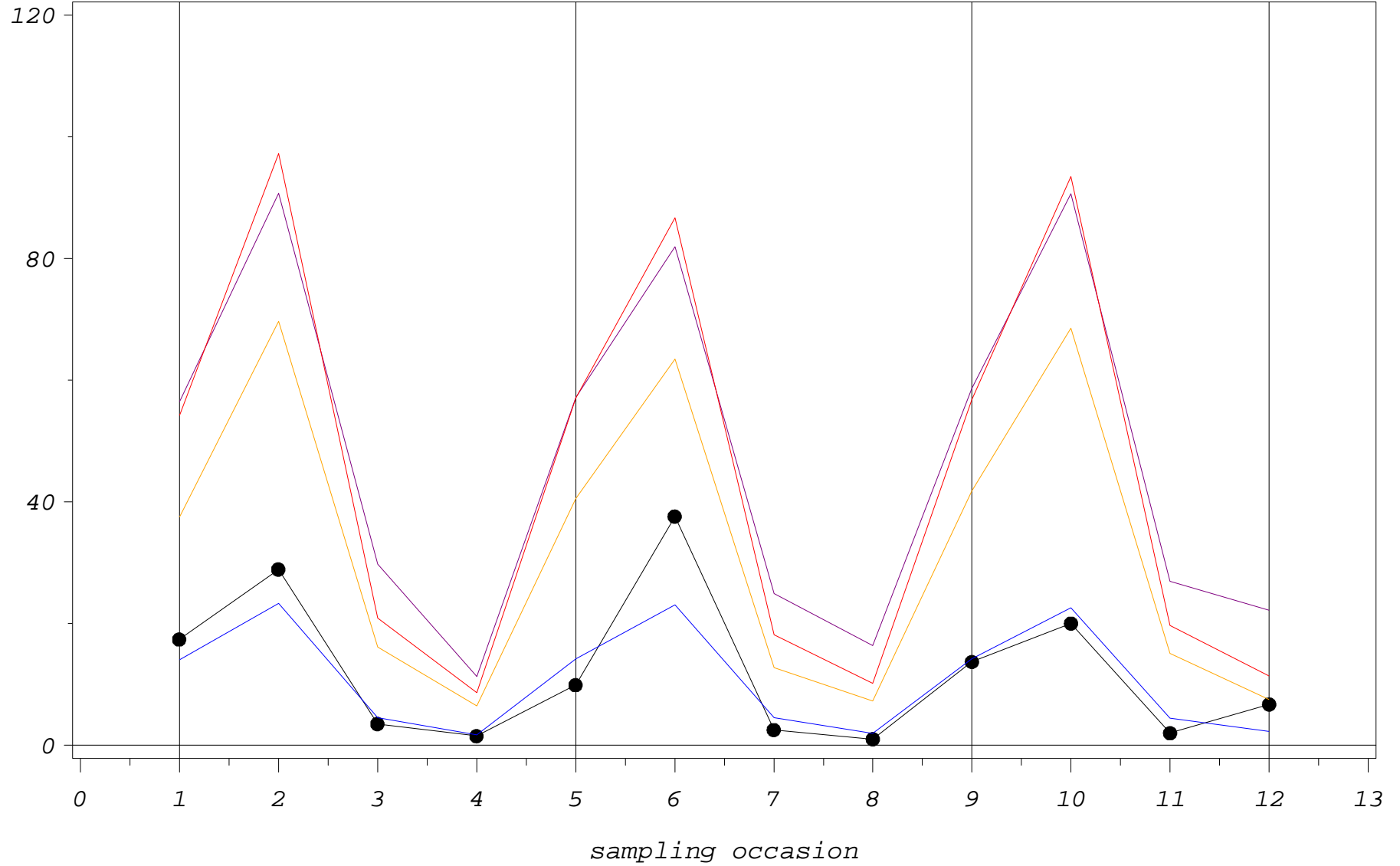
CODE=H03804



Study 2: cortisol single profiles with outlier fences

CODE=H03805

cortisol (nmol/l)

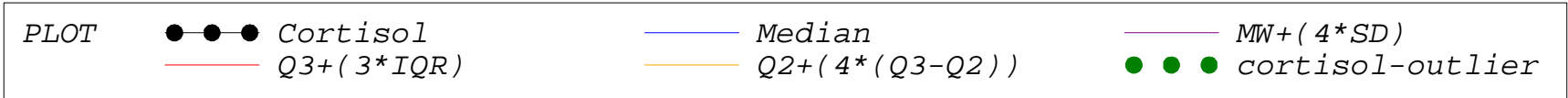
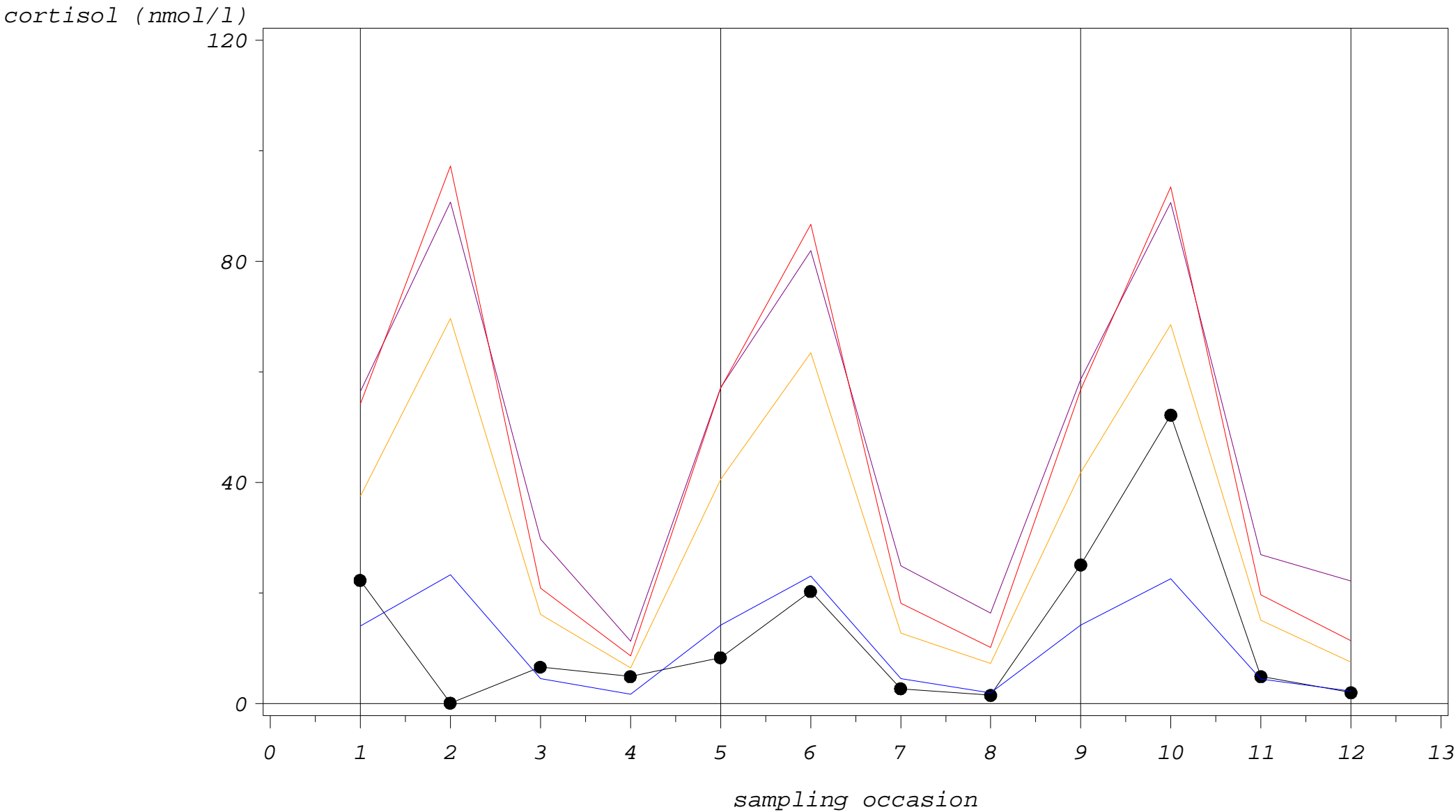


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

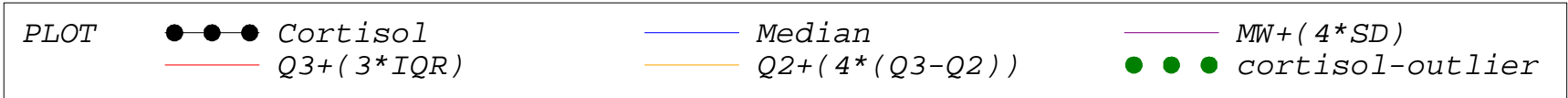
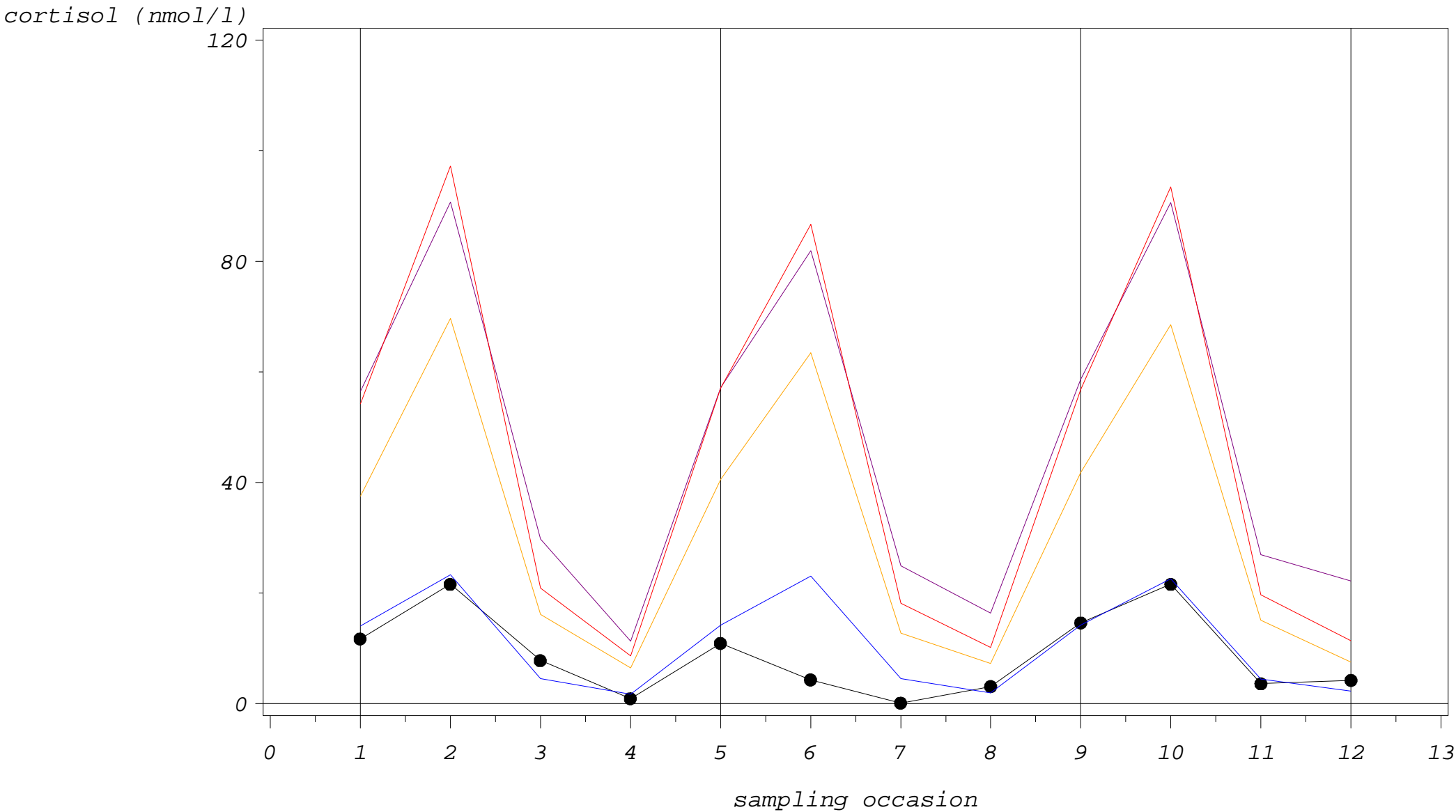
Study 2: cortisol single profiles with outlier fences

CODE=H03806



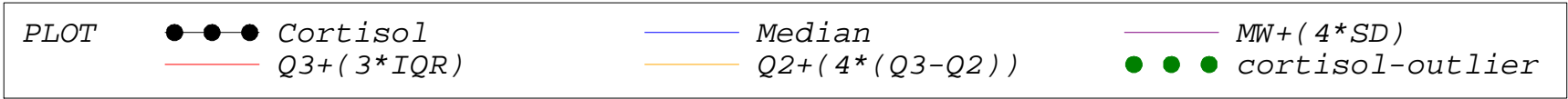
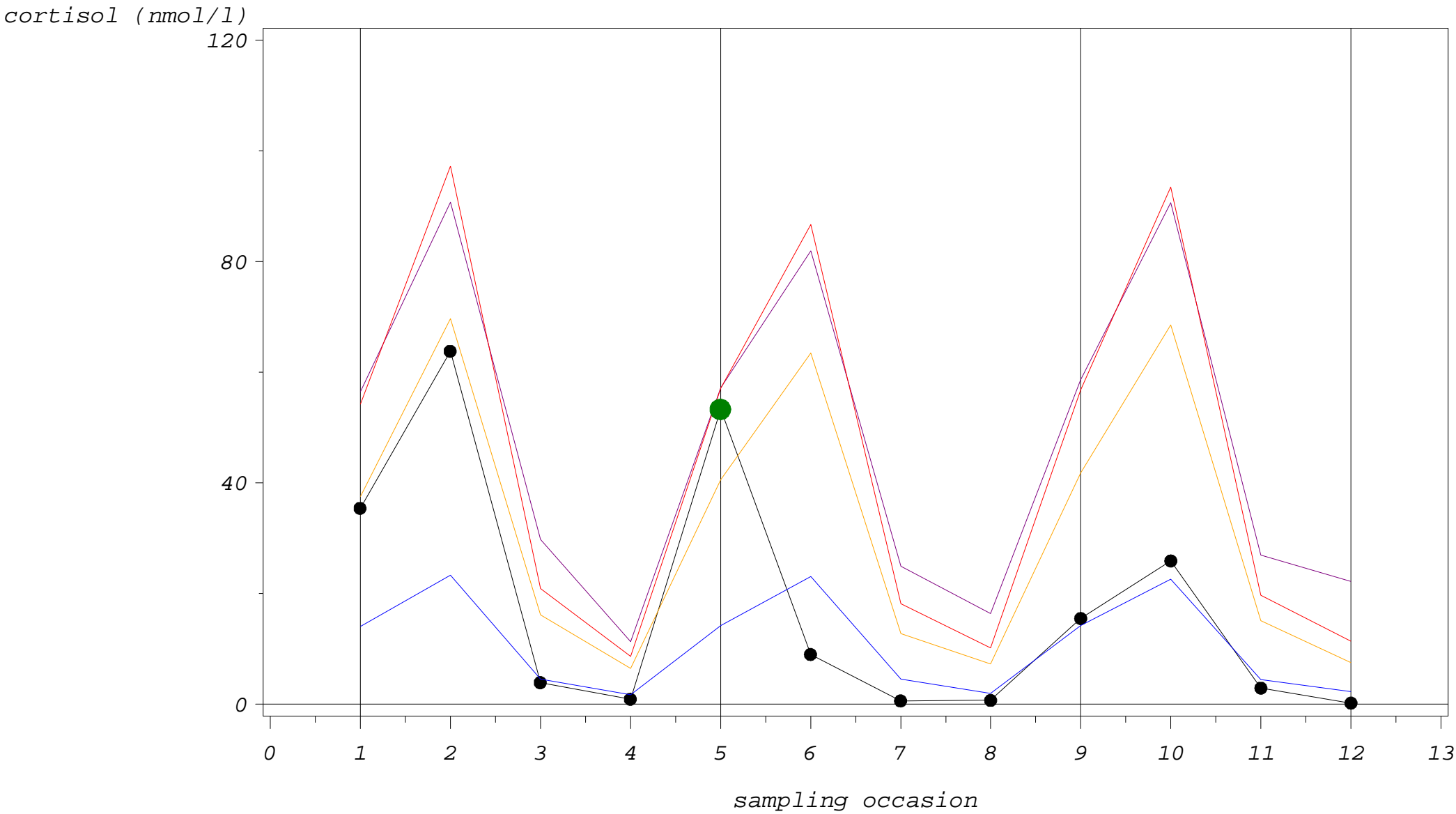
Study 2: cortisol single profiles with outlier fences

CODE=H03807



Study 2: cortisol single profiles with outlier fences

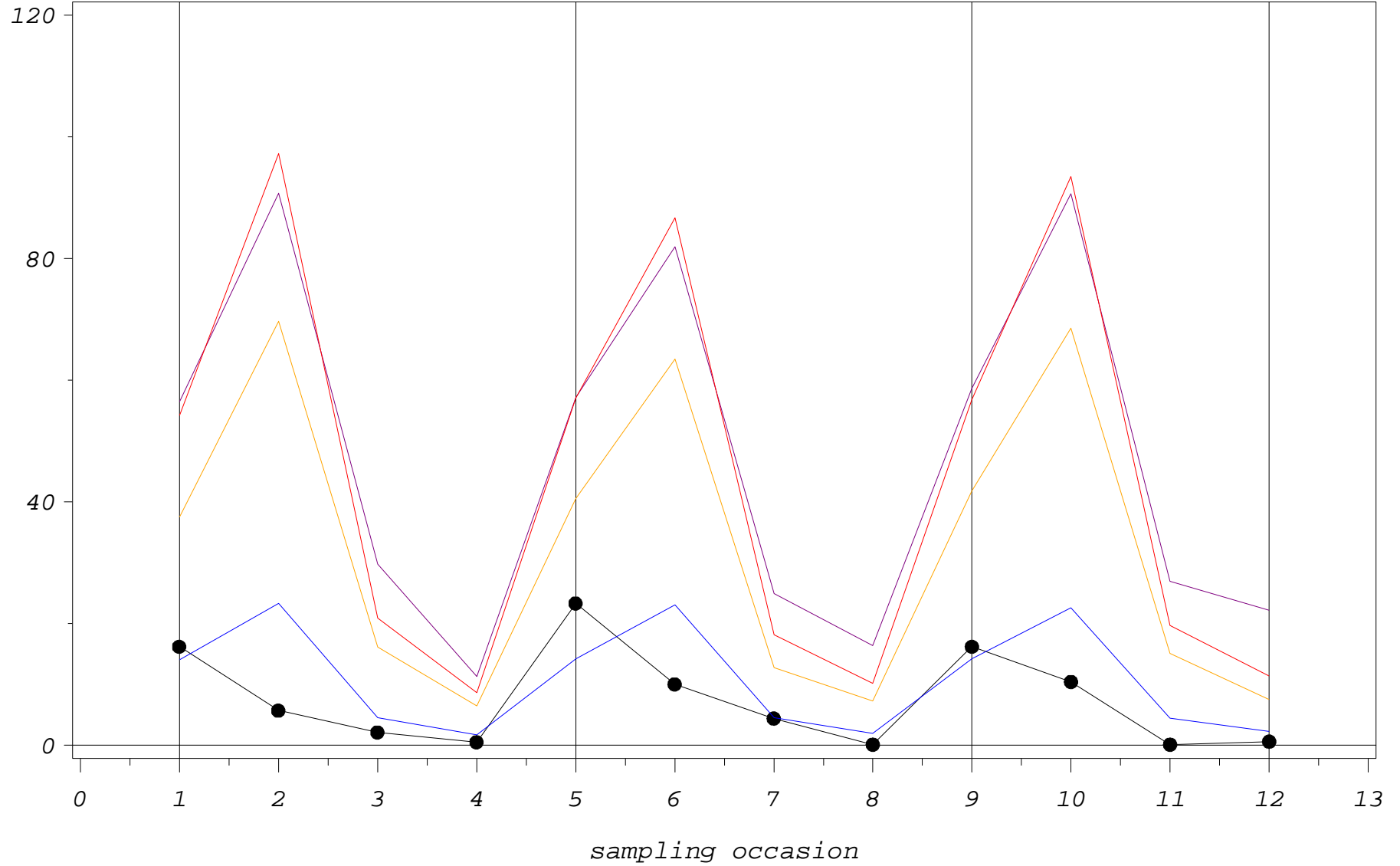
CODE=H03808



Study 2: cortisol single profiles with outlier fences

CODE=H03809

cortisol (nmol/l)

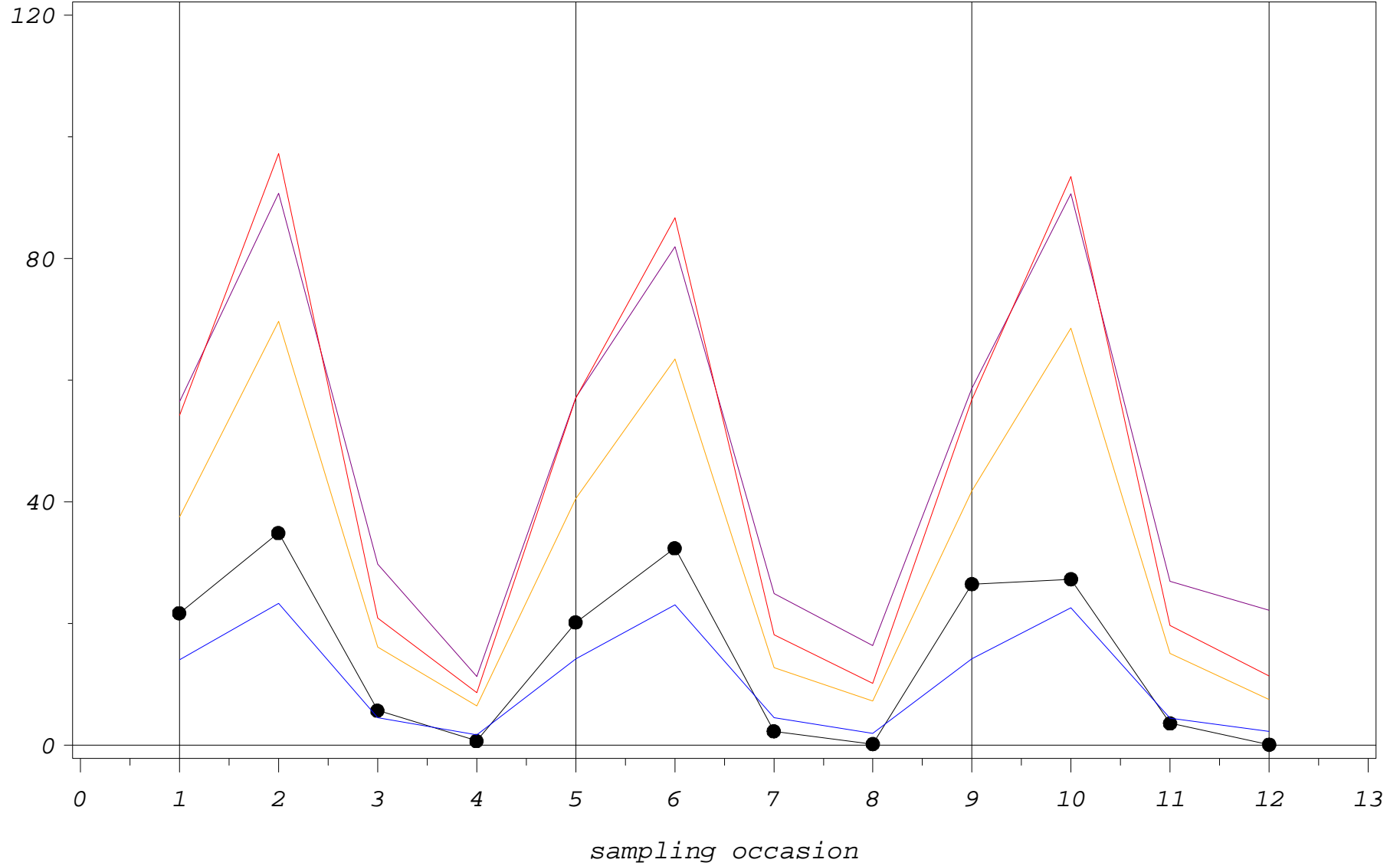


PLOT ●—●—● Cortisol — Median — $MW+(4*SD)$
 — $Q3+(3*IQR)$ — $Q2+(4*(Q3-Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03810

cortisol (nmol/l)

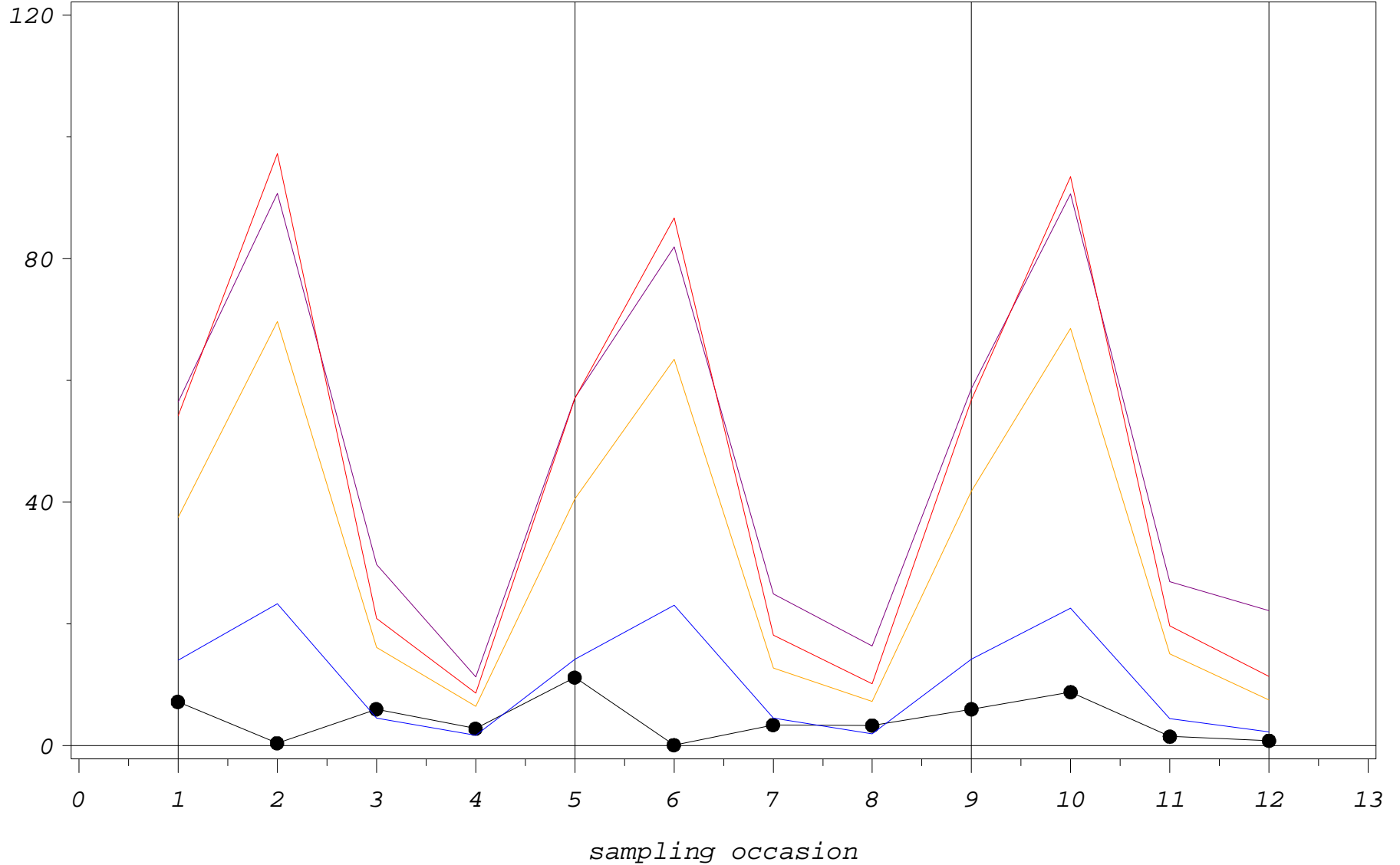


PLOT ●—●—● Cortisol — Median — $MW + (4 * SD)$
 — $Q3 + (3 * IQR)$ — $Q2 + (4 * (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03811

cortisol (nmol/l)

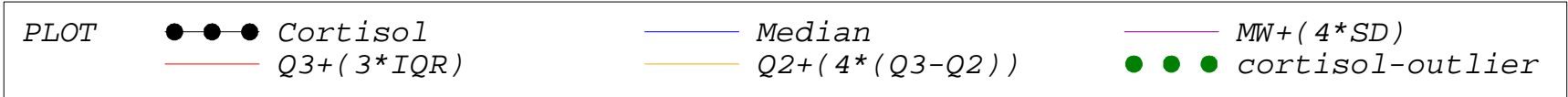
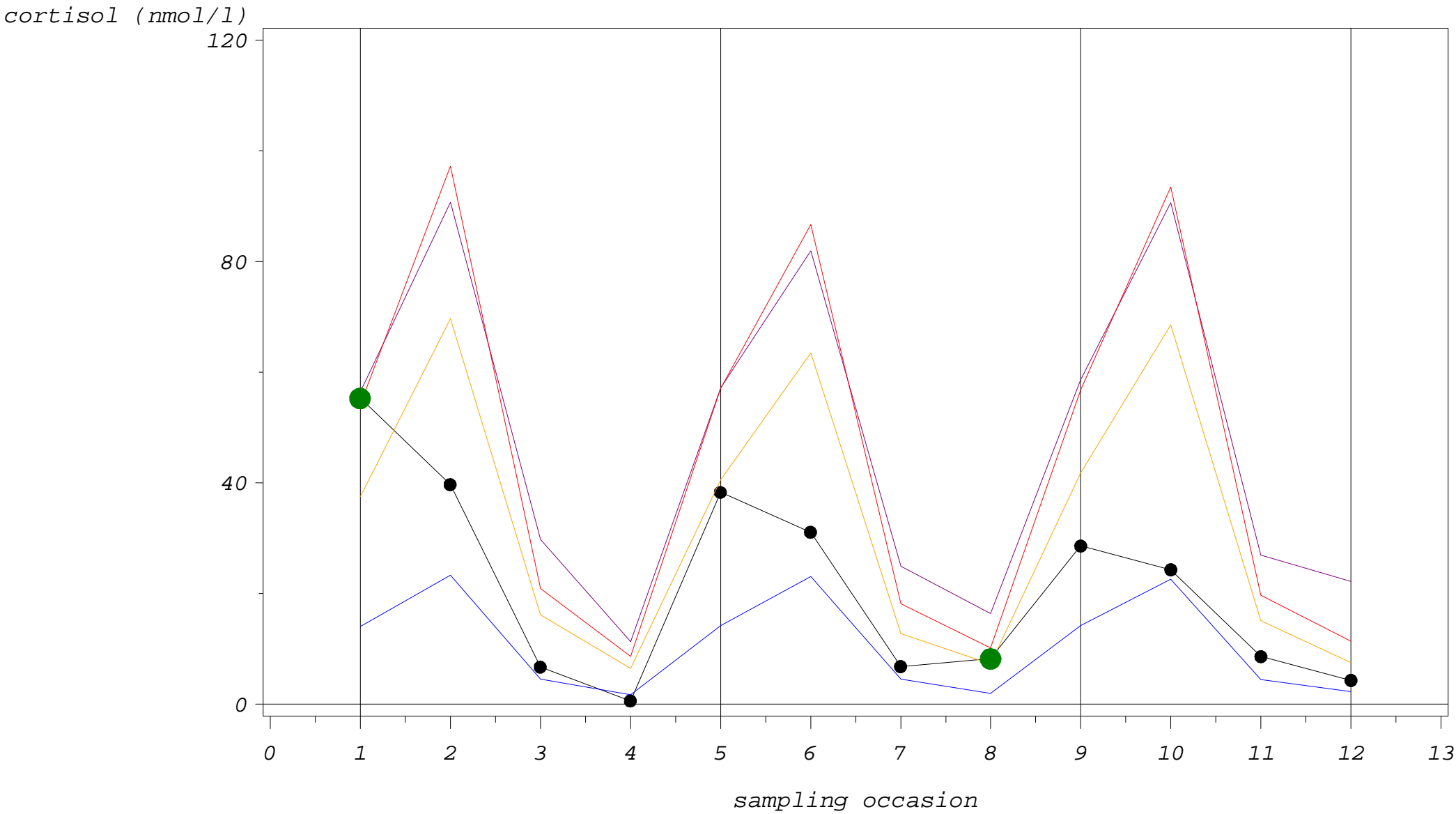


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

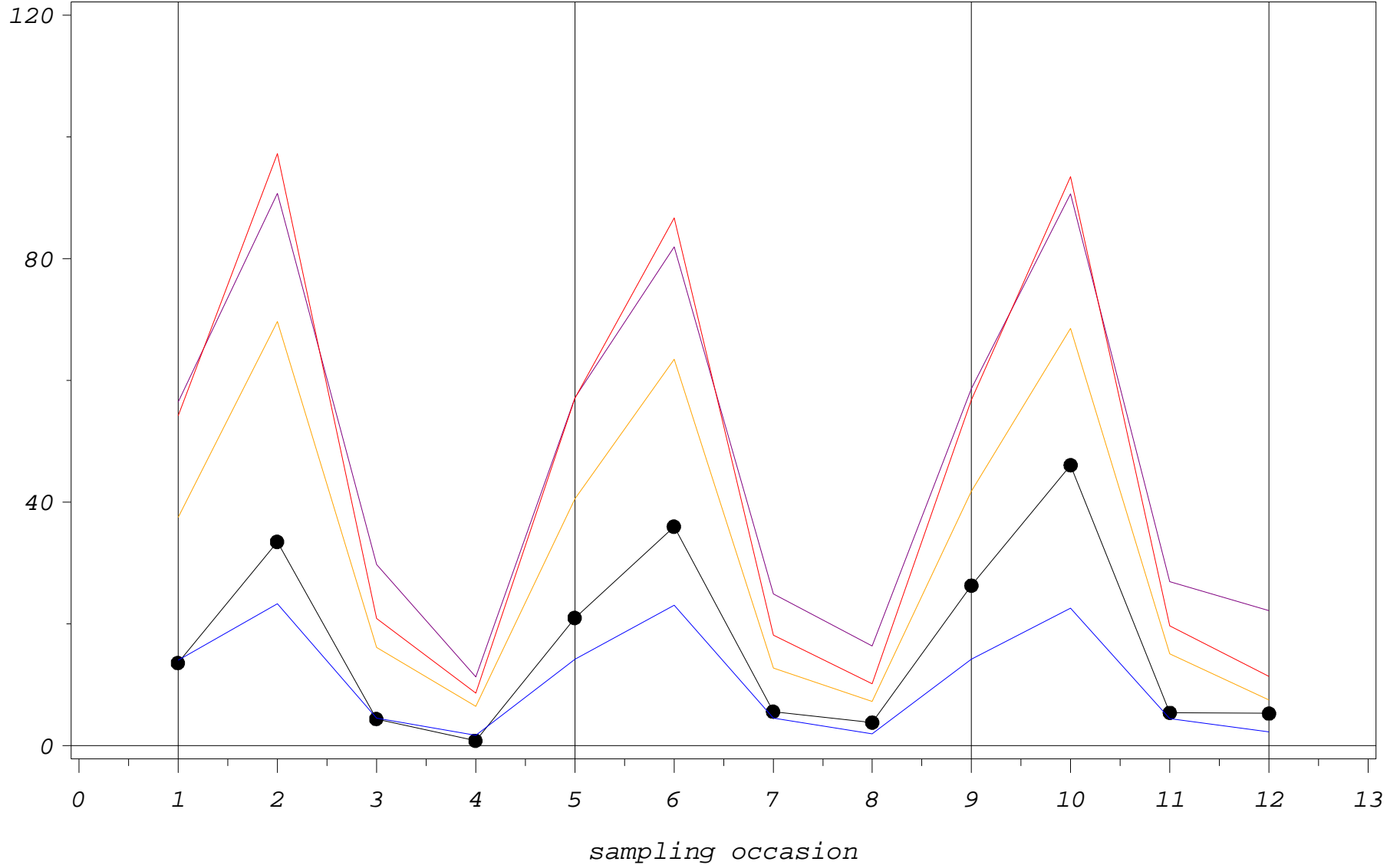
CODE=H03812



Study 2: cortisol single profiles with outlier fences

CODE=H03813

cortisol (nmol/l)



PLOT

●—●—● Cortisol
— Q3+(3*IQR)

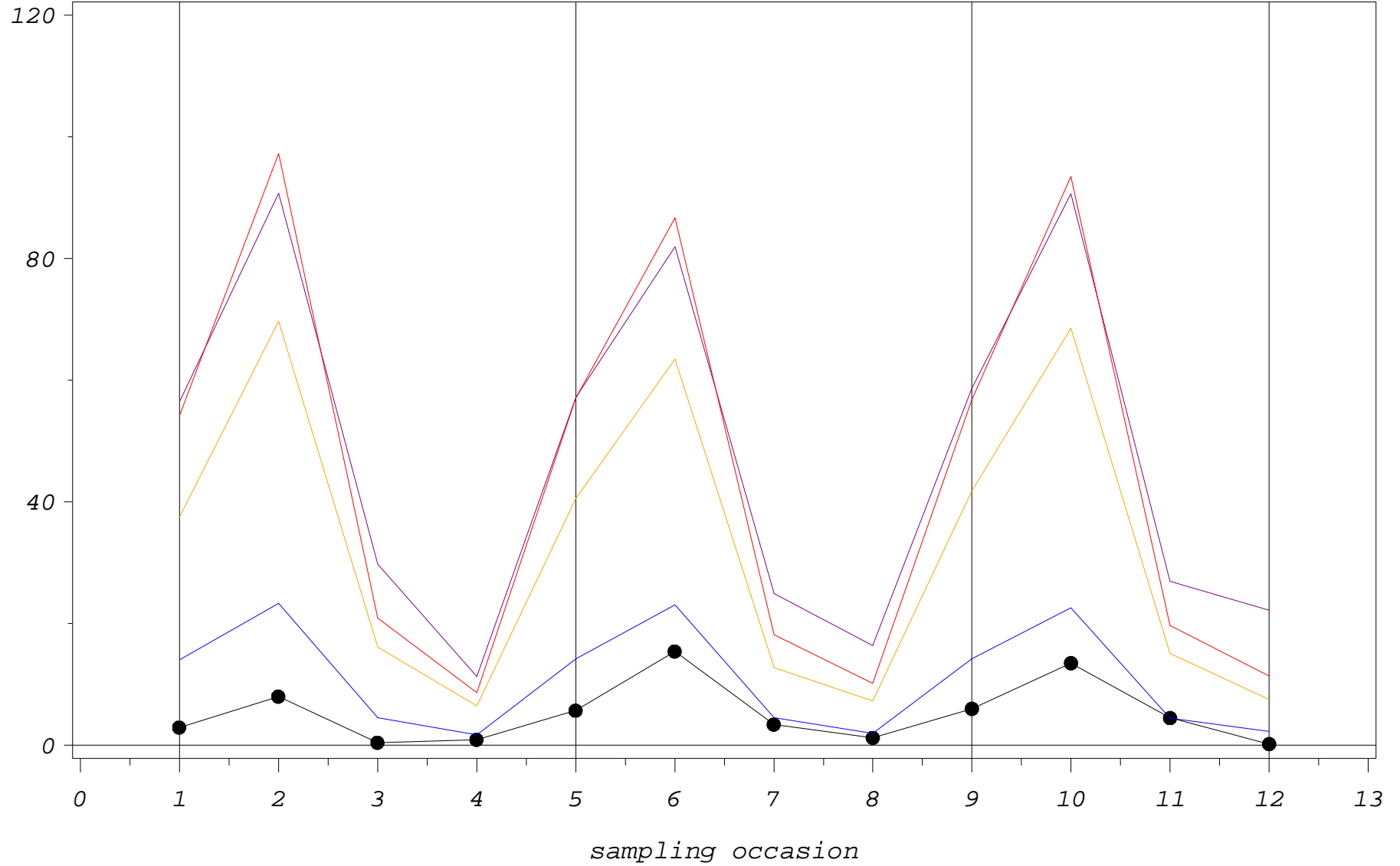
— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03814

cortisol (nmol/l)

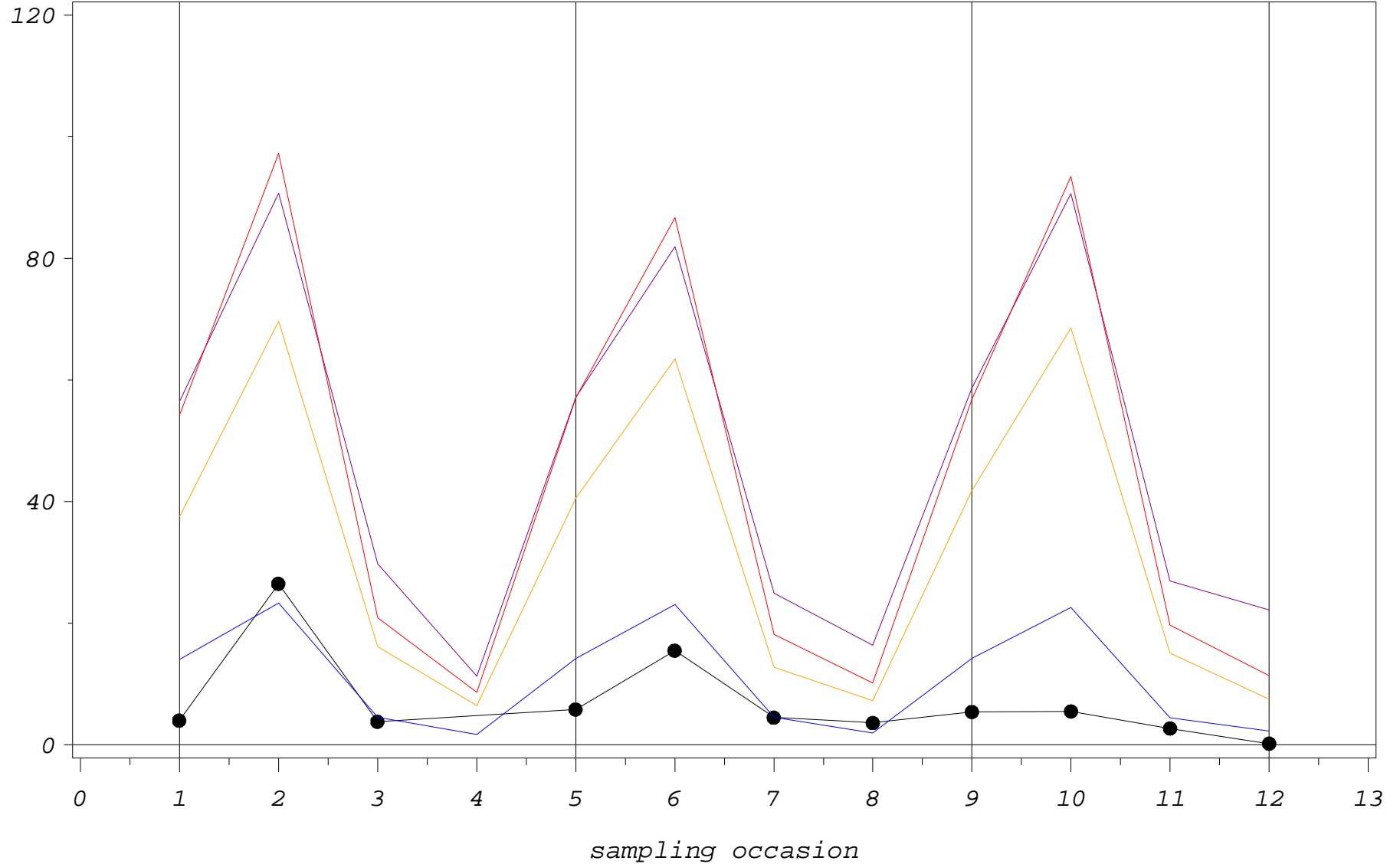


PLOT ●—●—● Cortisol — Median — $MW + (4 \times SD)$
 — $Q3 + (3 \times IQR)$ — $Q2 + (4 \times (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03816

cortisol (nmol/l)

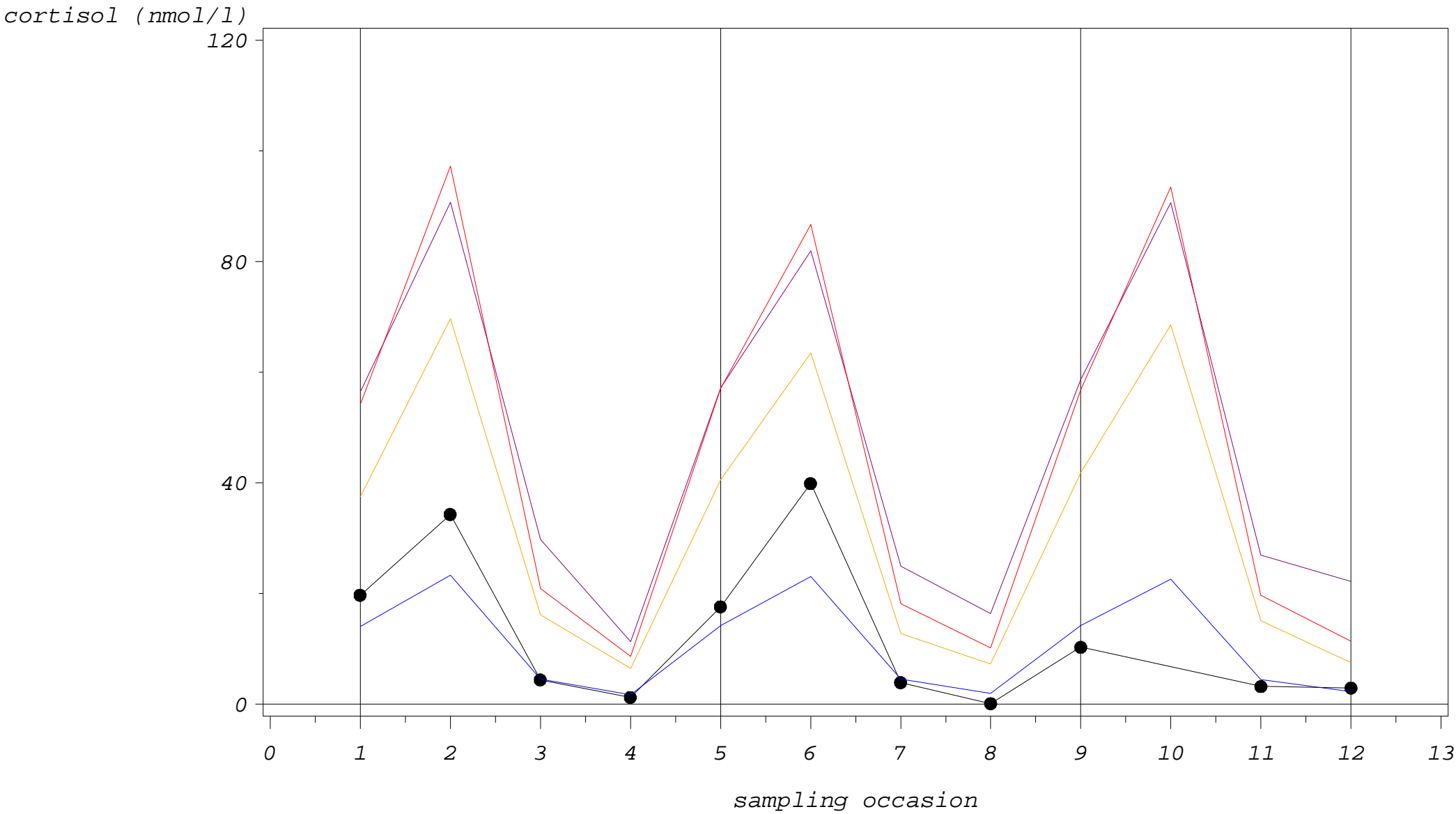


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

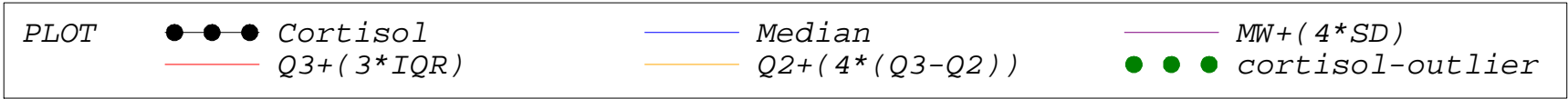
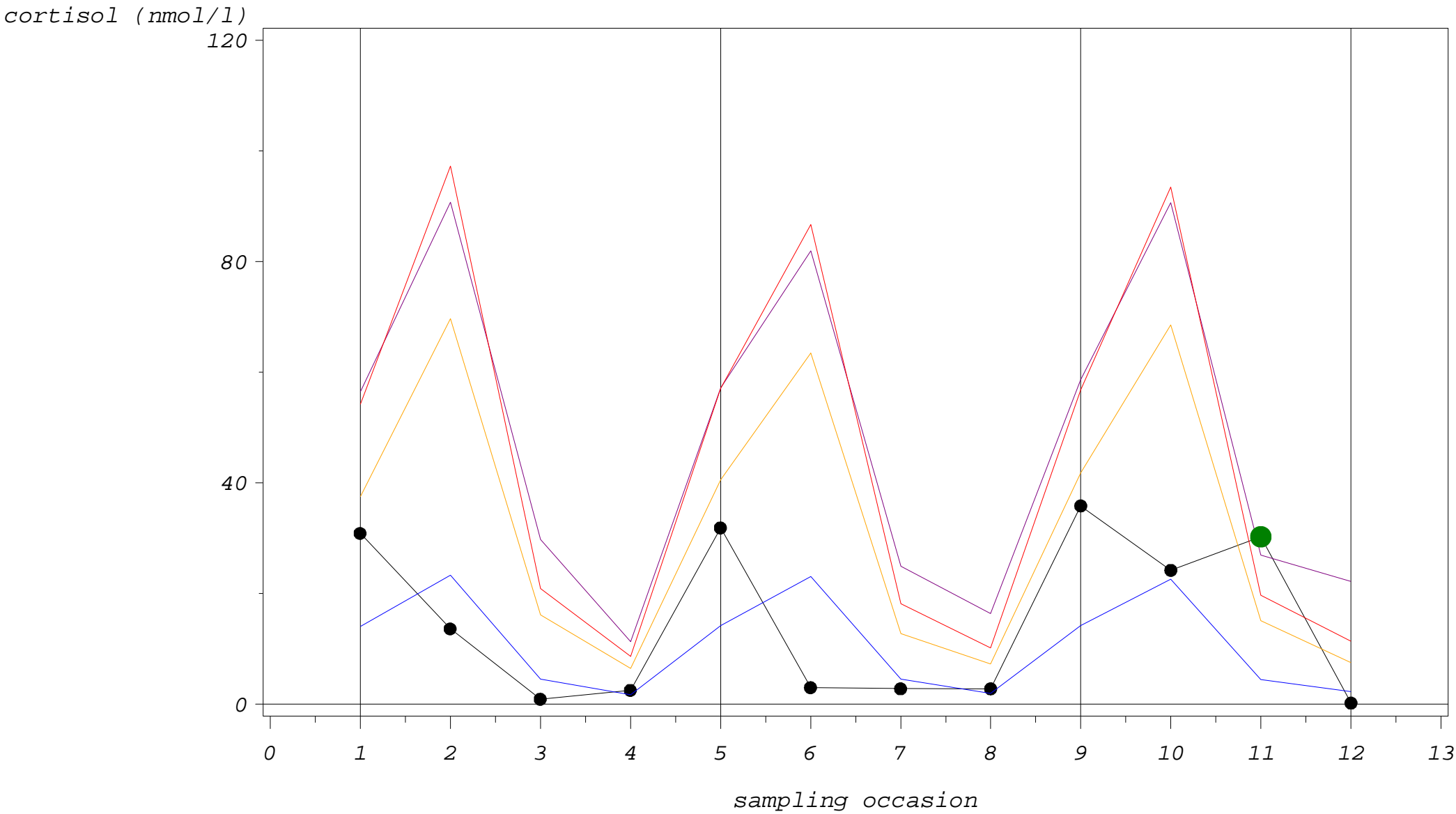
Study 2: cortisol single profiles with outlier fences

CODE=H03817



Study 2: cortisol single profiles with outlier fences

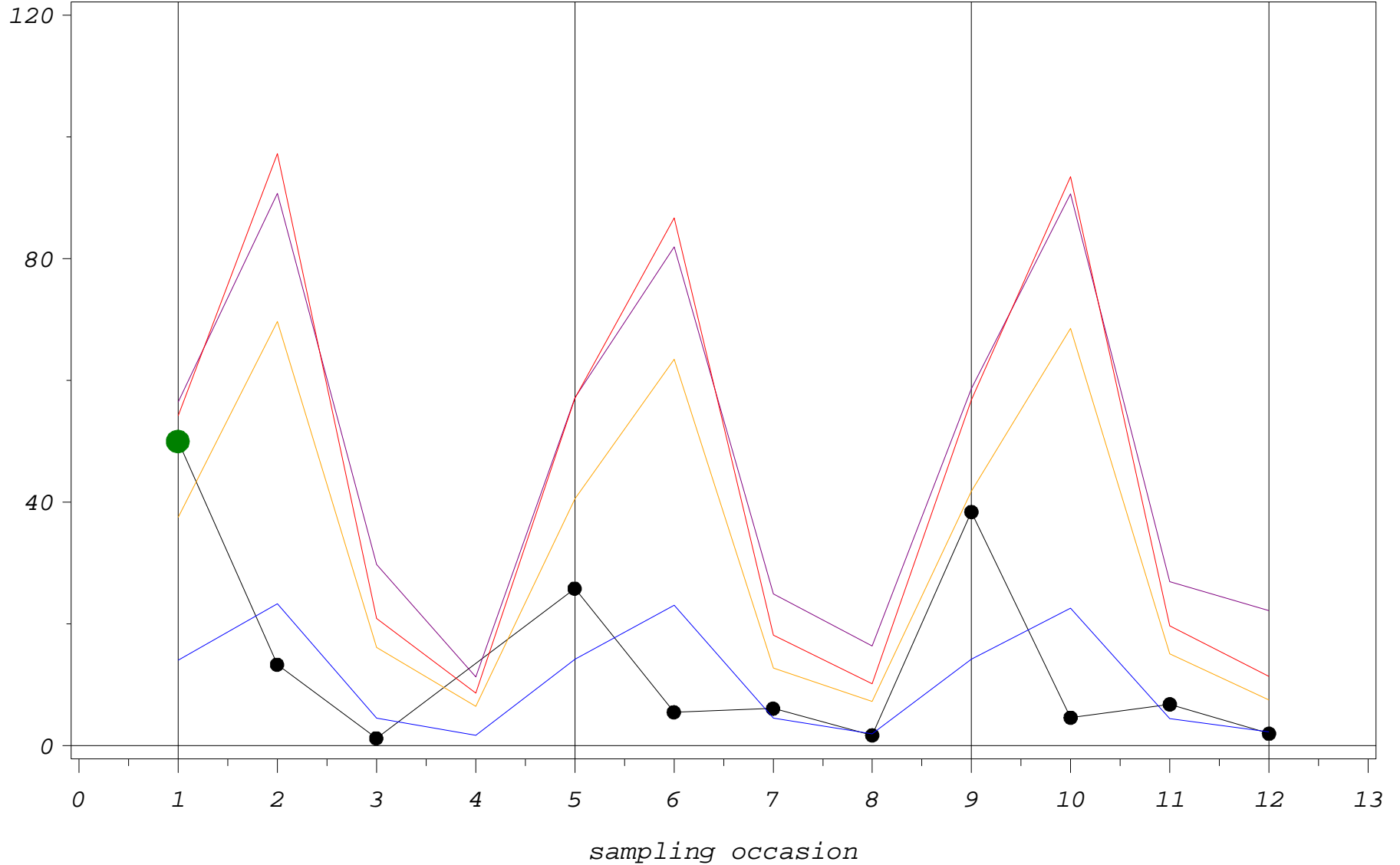
CODE=H03818



Study 2: cortisol single profiles with outlier fences

CODE=H03819

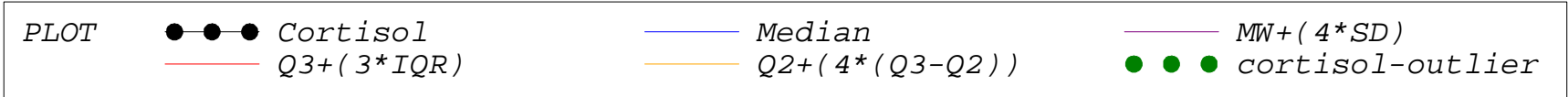
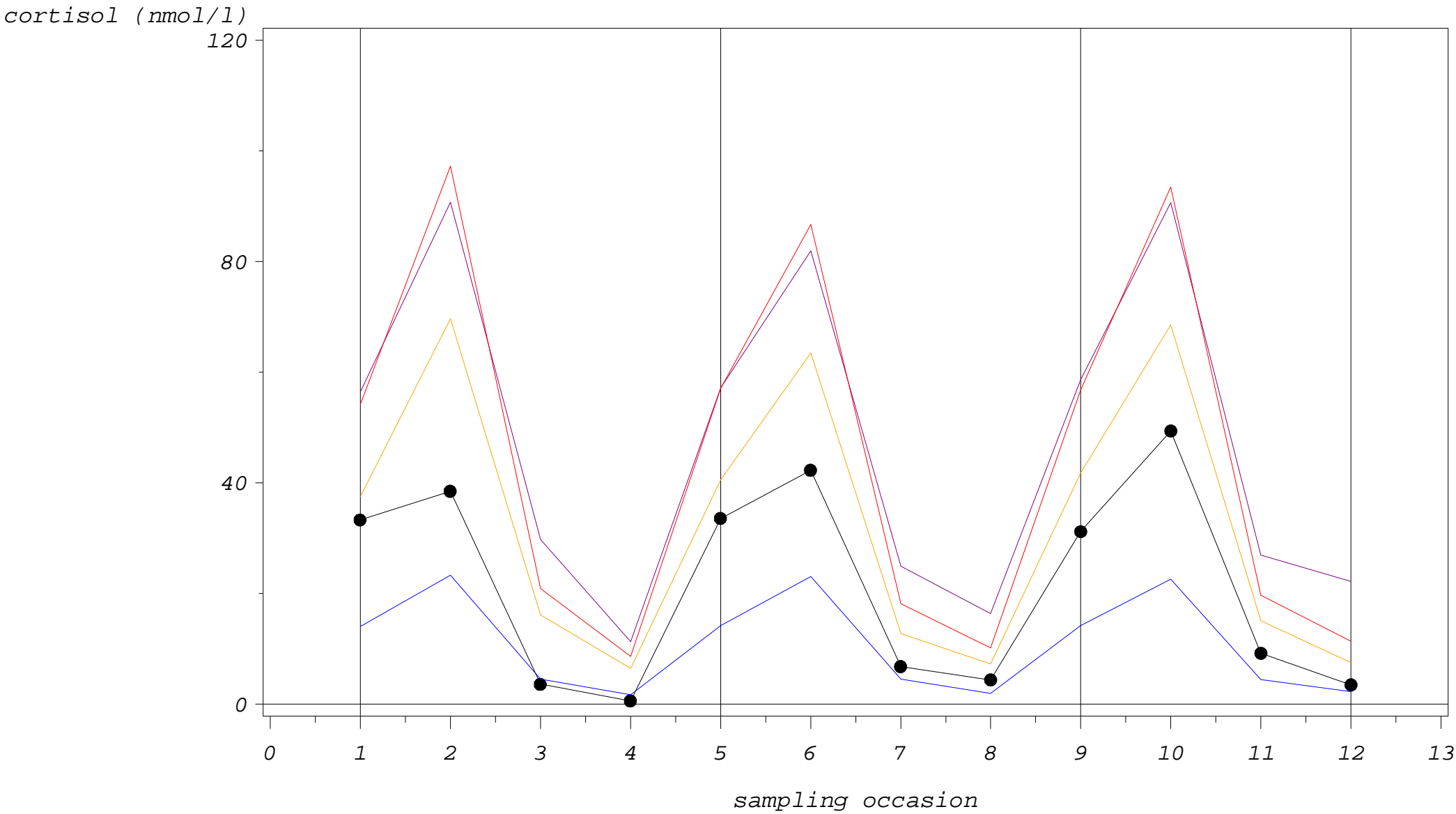
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

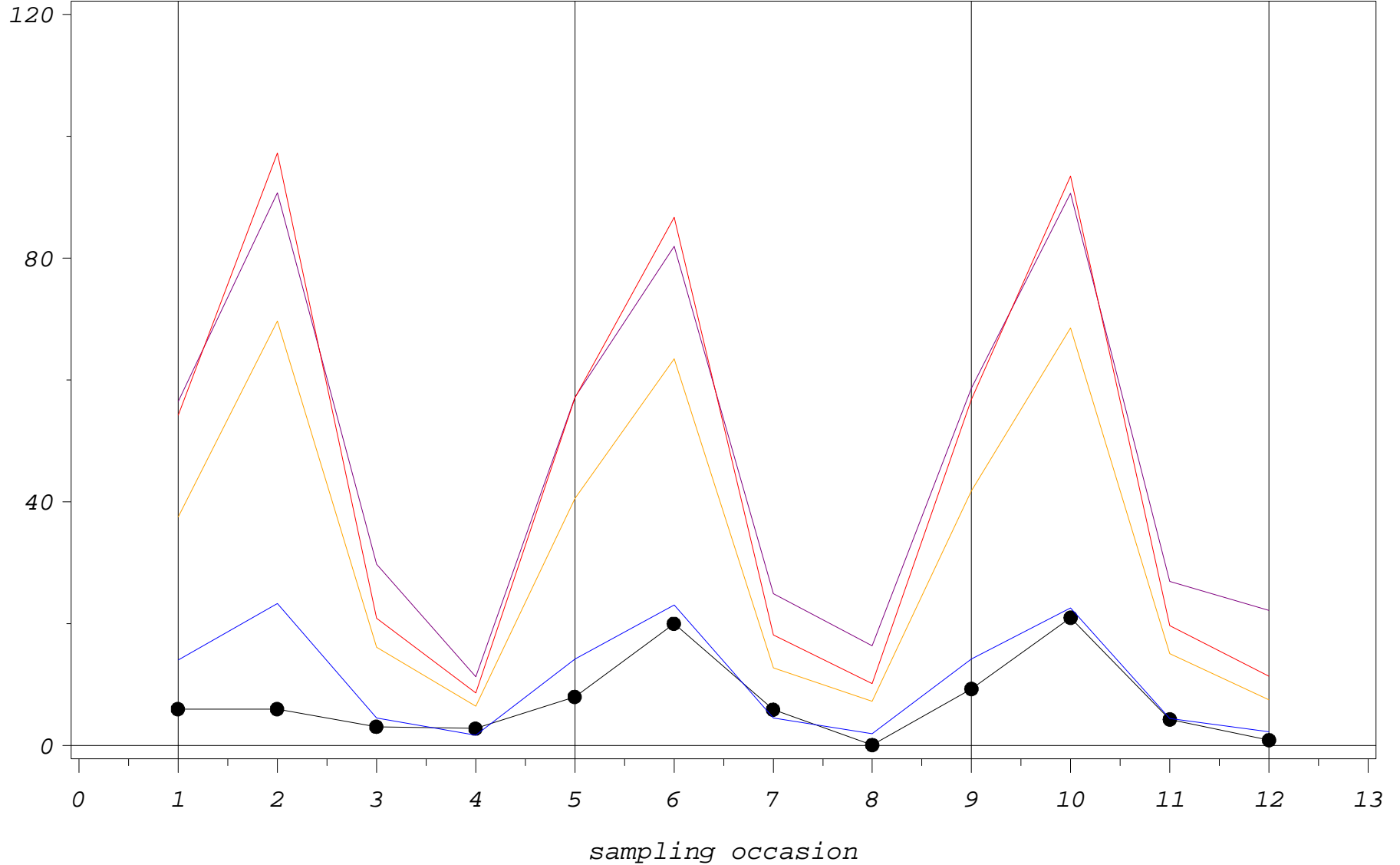
CODE=H03820



Study 2: cortisol single profiles with outlier fences

CODE=H03901

cortisol (nmol/l)



PLOT

●—● Cortisol
— $Q3 + (3 \times IQR)$

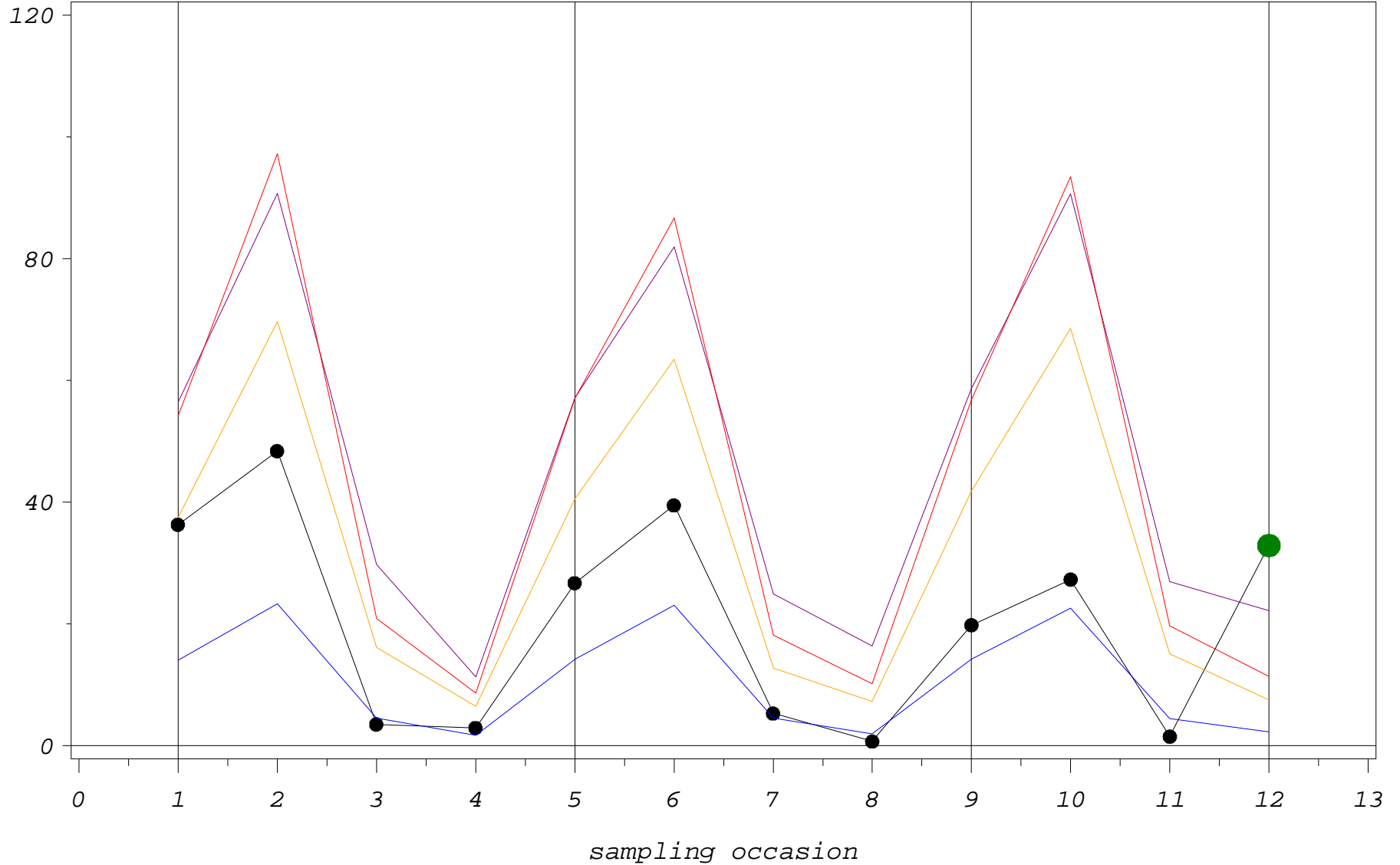
— Median
— $Q2 + (4 \times (Q3 - Q2))$

— $MW + (4 \times SD)$
● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03902

cortisol (nmol/l)

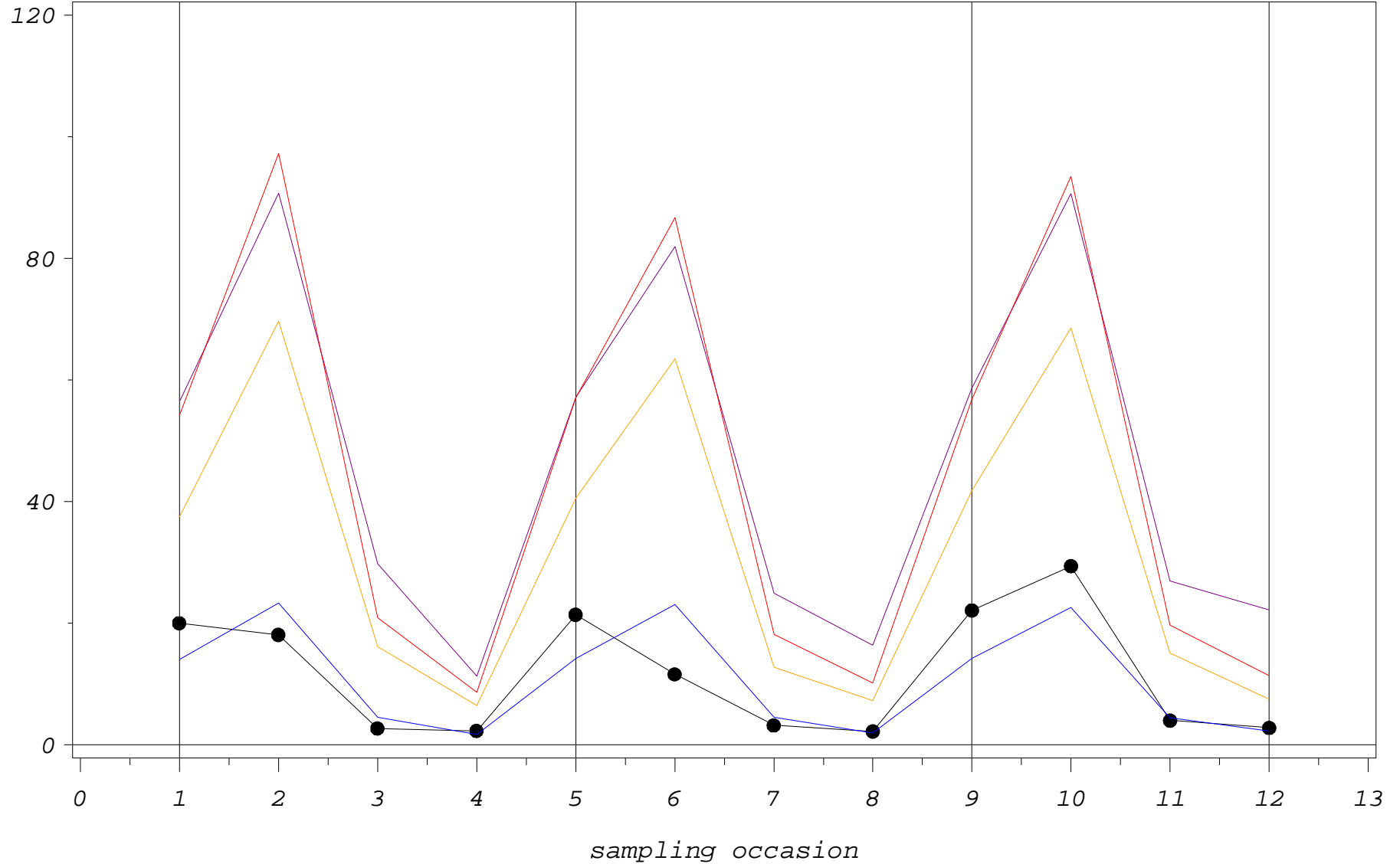


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03903

cortisol (nmol/l)

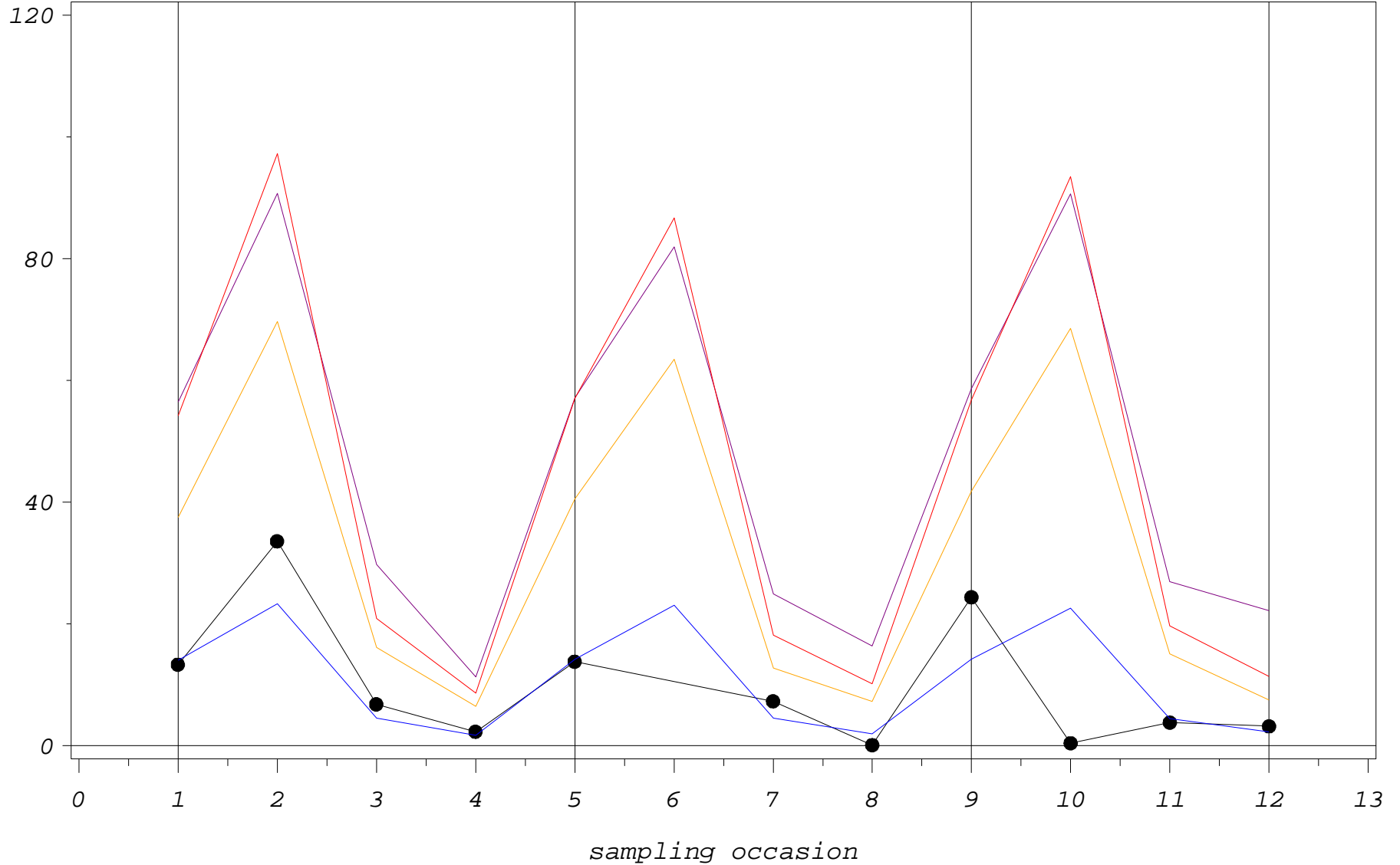


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03904

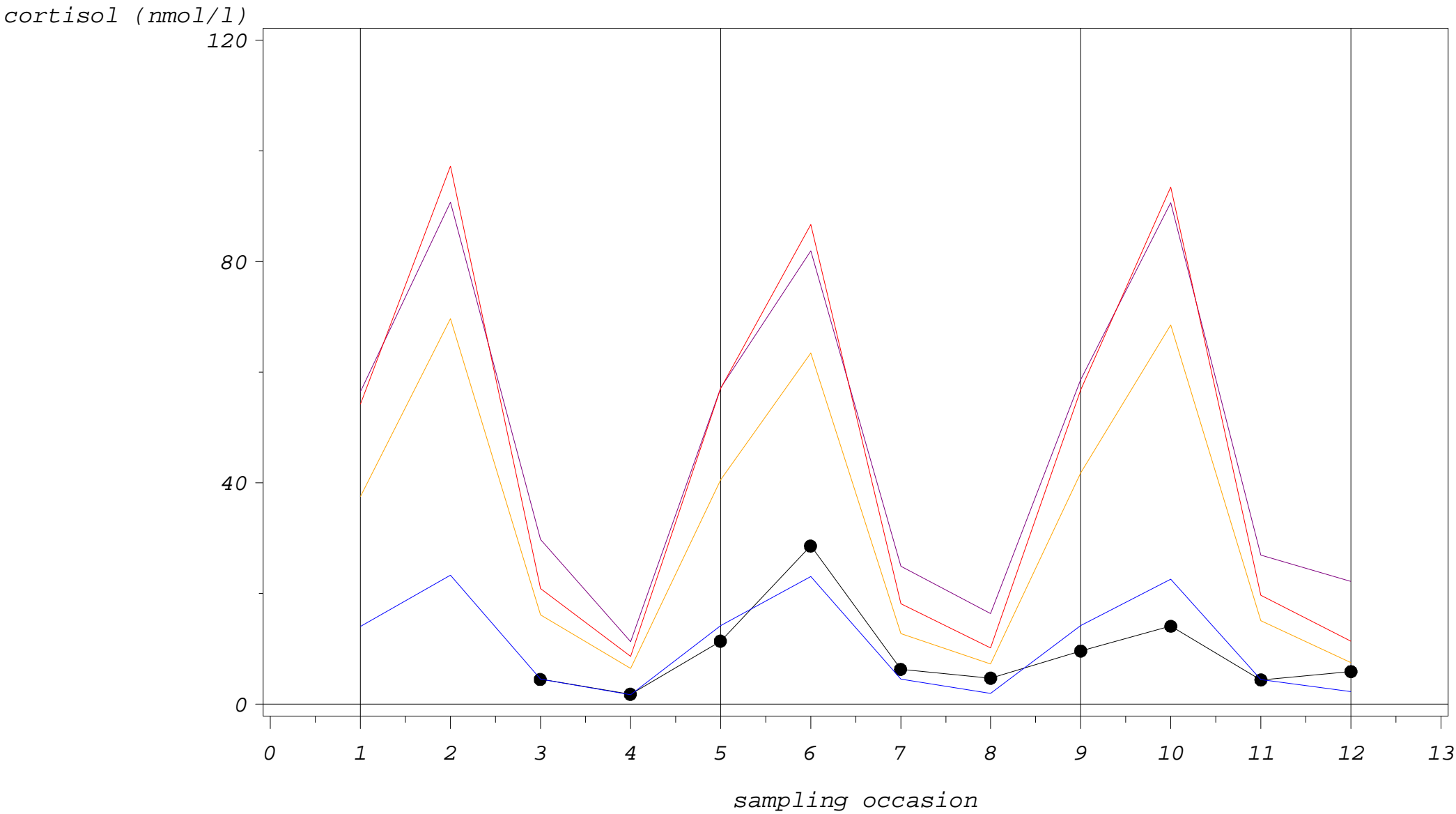
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

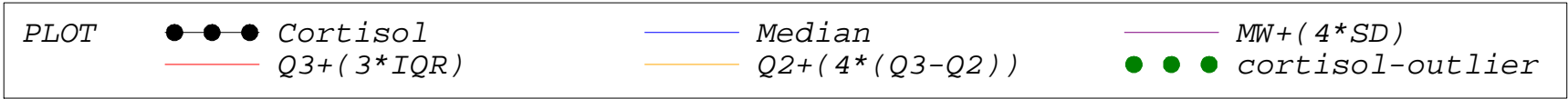
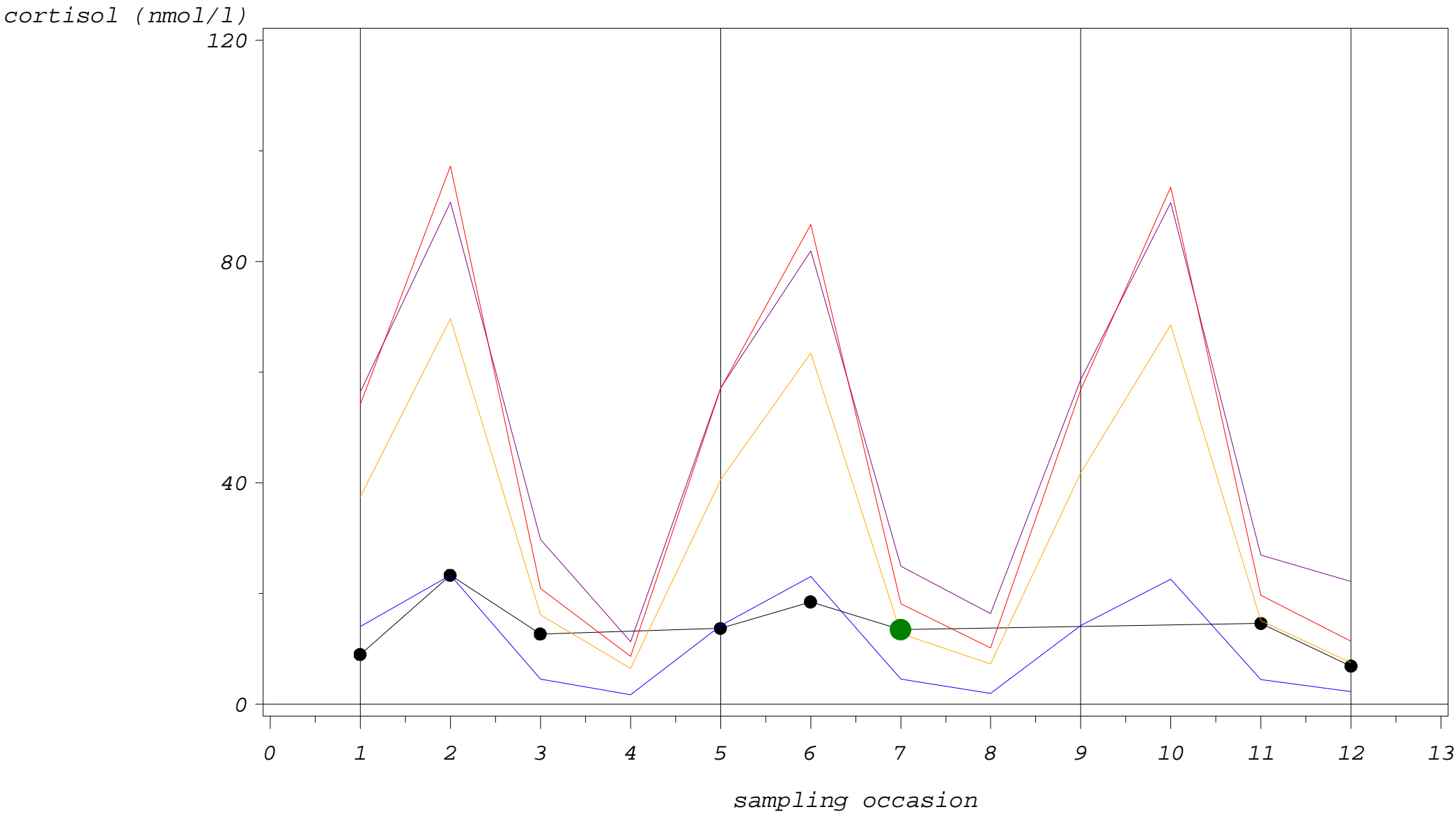
Study 2: cortisol single profiles with outlier fences

CODE=H03905



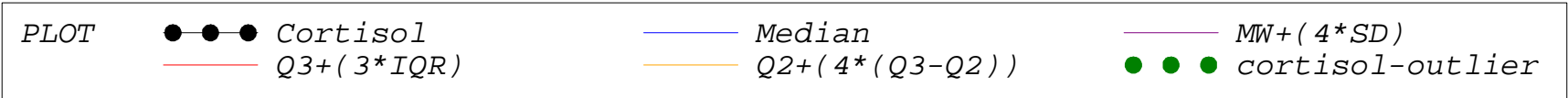
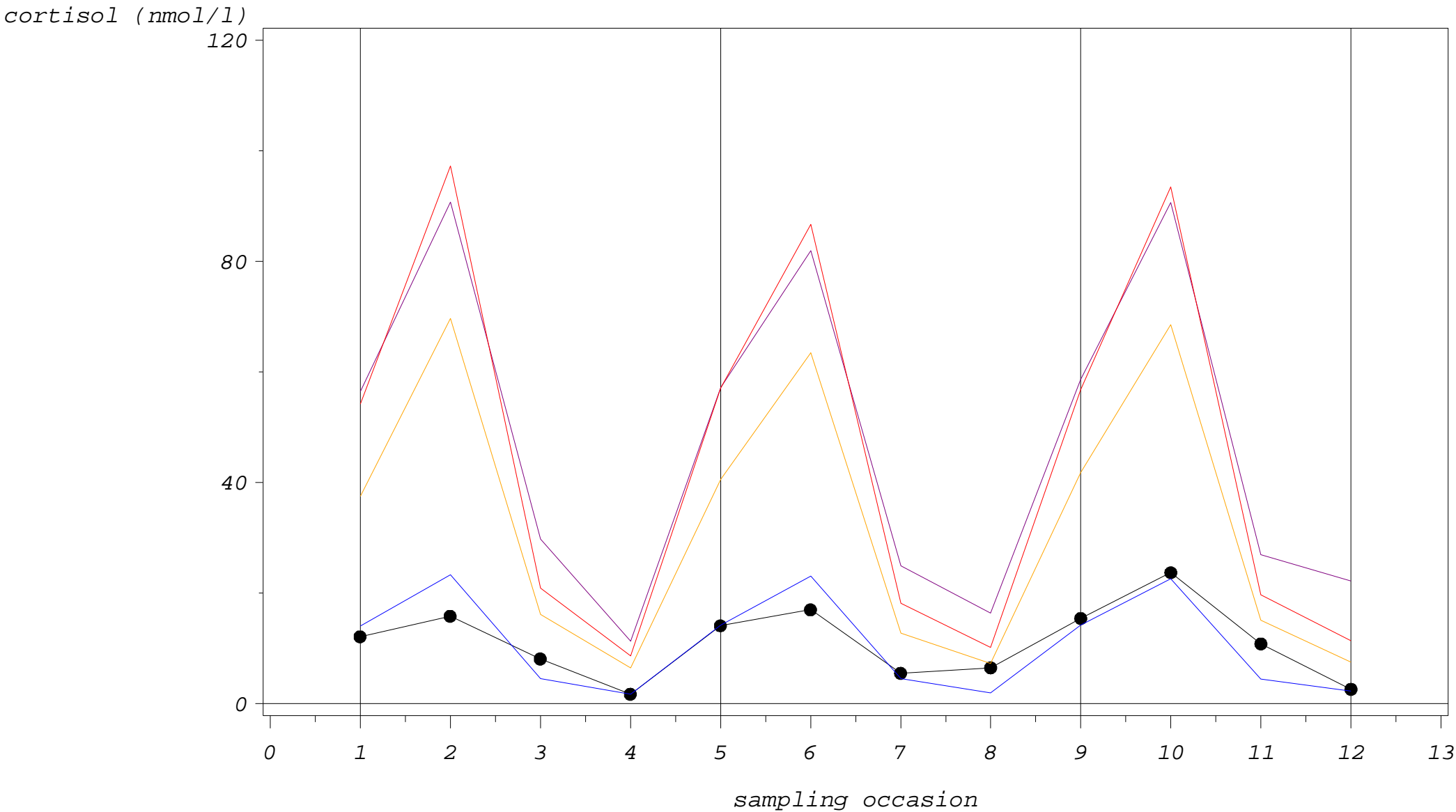
Study 2: cortisol single profiles with outlier fences

CODE=H03906



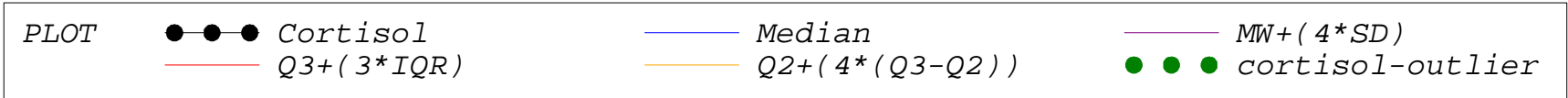
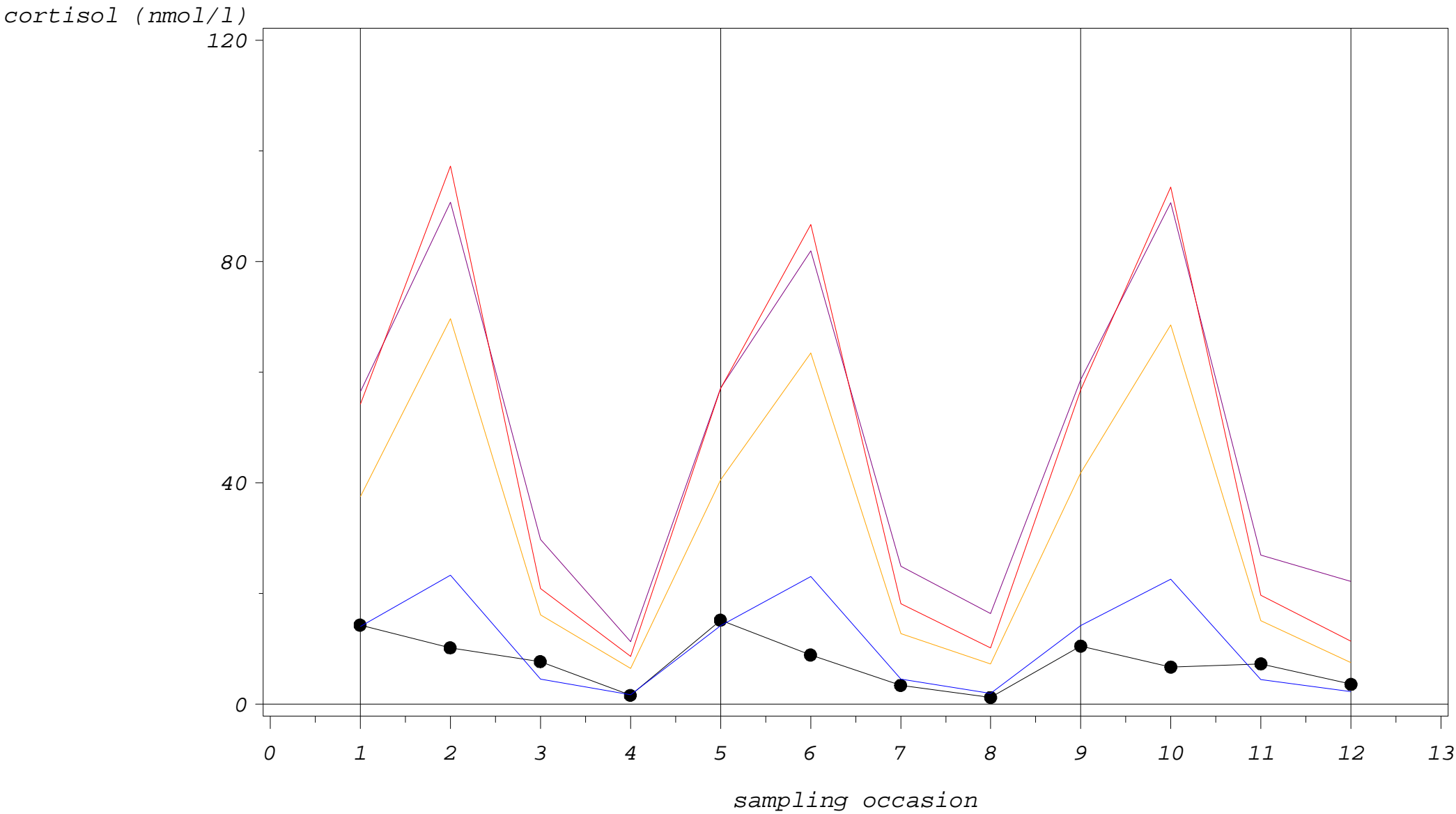
Study 2: cortisol single profiles with outlier fences

CODE=H03907



Study 2: cortisol single profiles with outlier fences

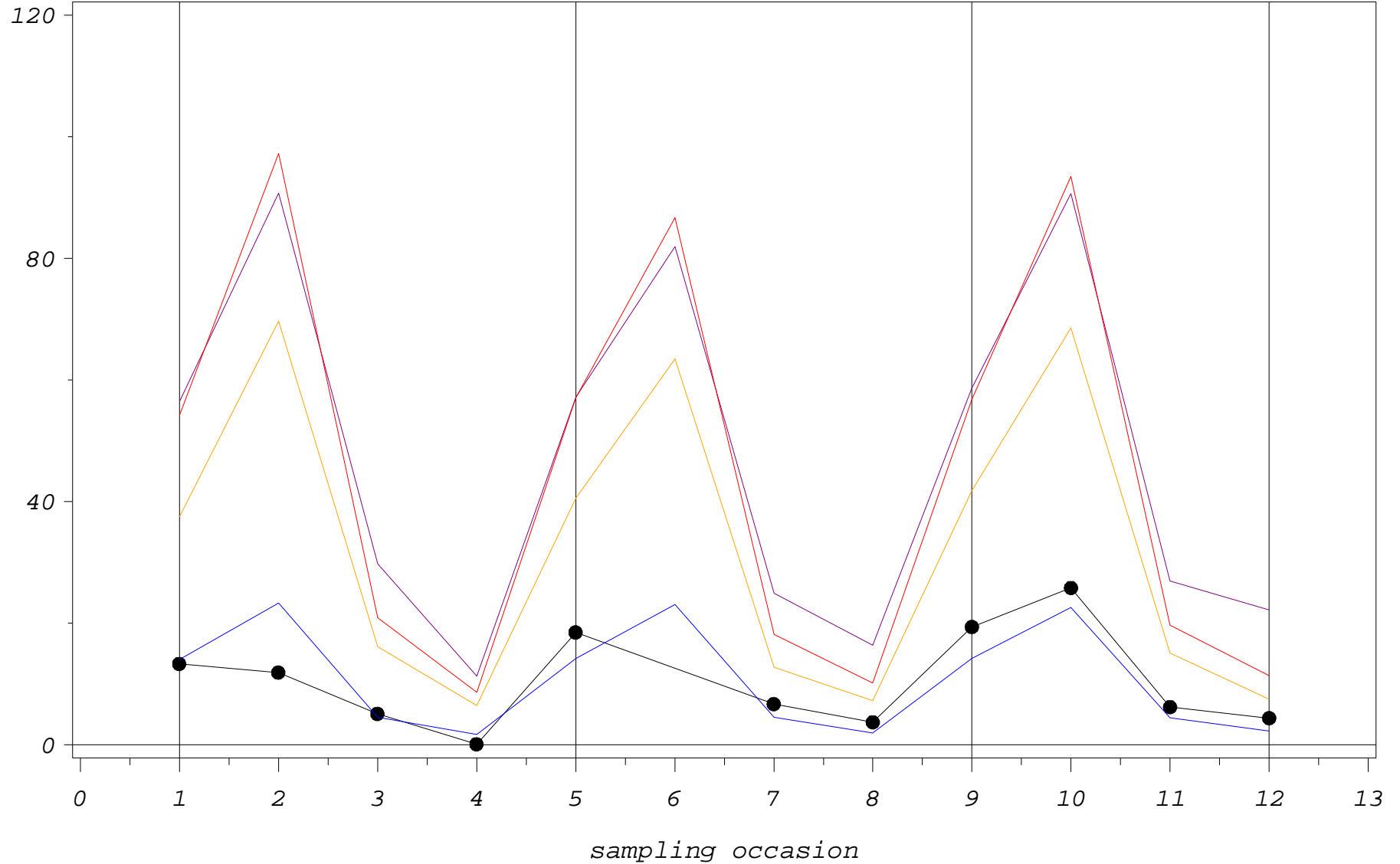
CODE=H03908



Study 2: cortisol single profiles with outlier fences

CODE=H03910

cortisol (nmol/l)

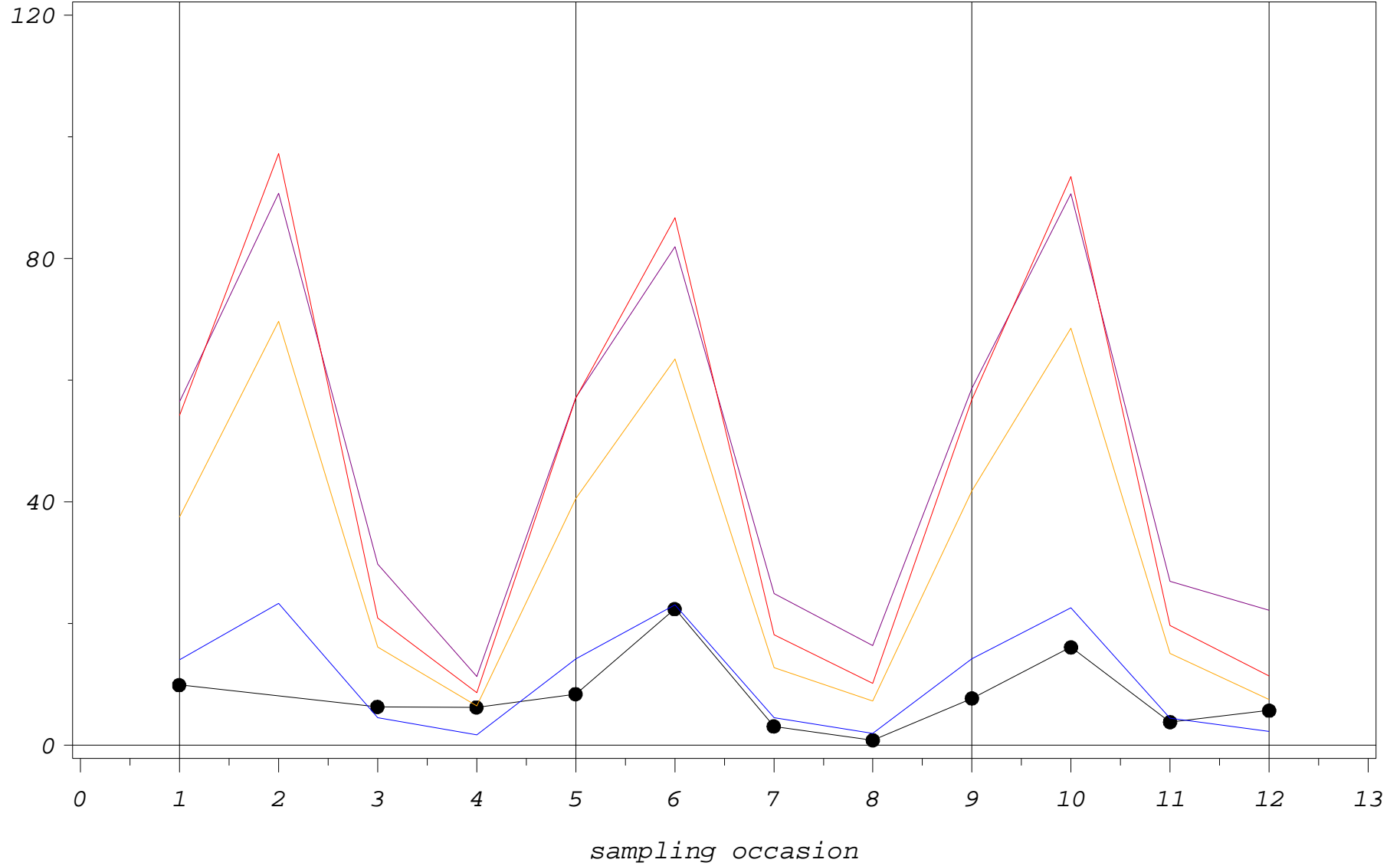


PLOT ●—●—● Cortisol — Median — $MW + (4 * SD)$
 — $Q3 + (3 * IQR)$ — $Q2 + (4 * (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H03912

cortisol (nmol/l)

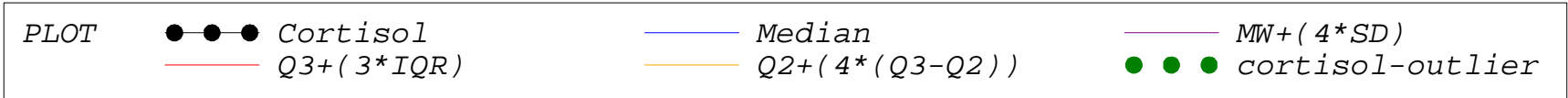
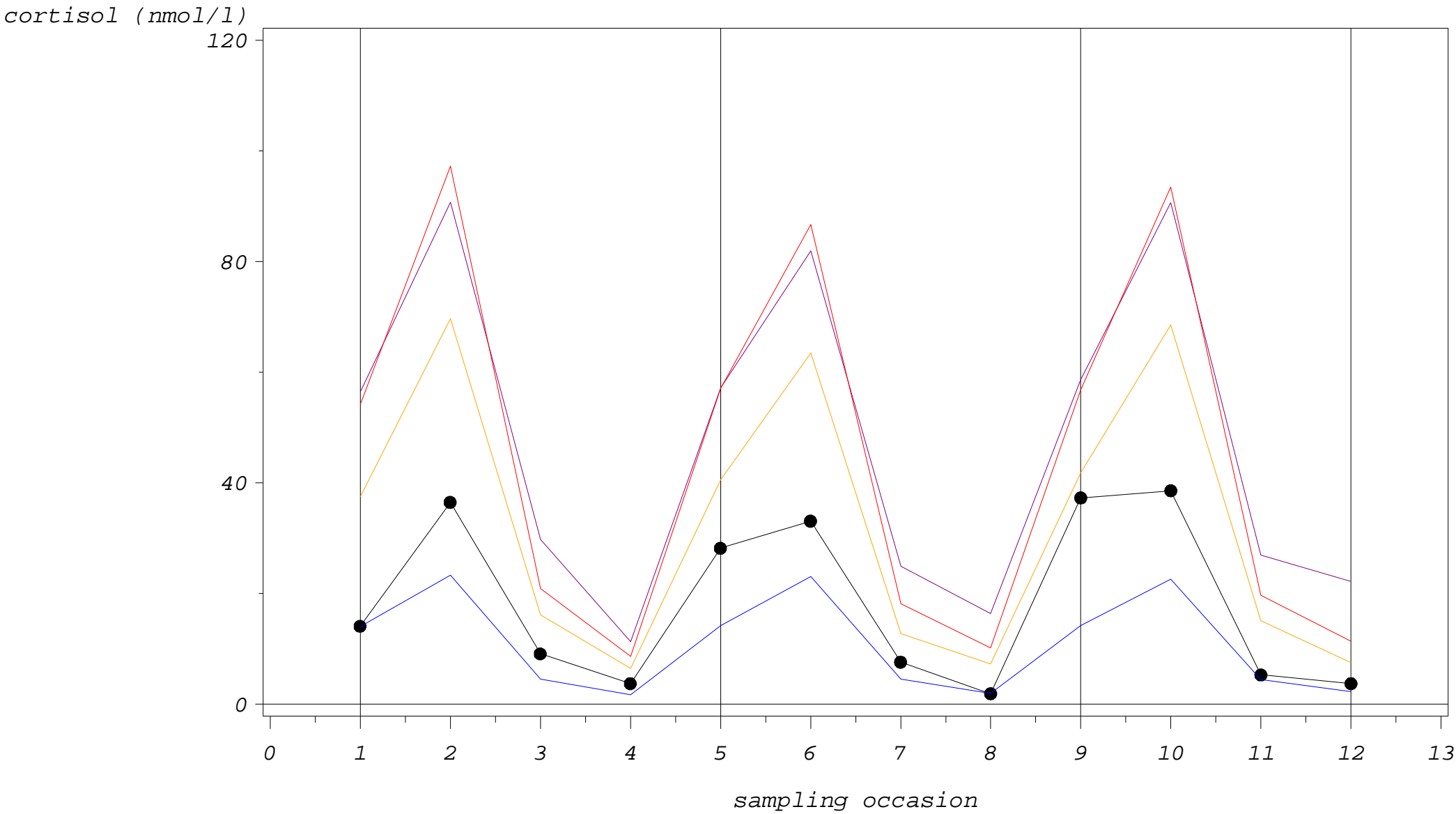


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

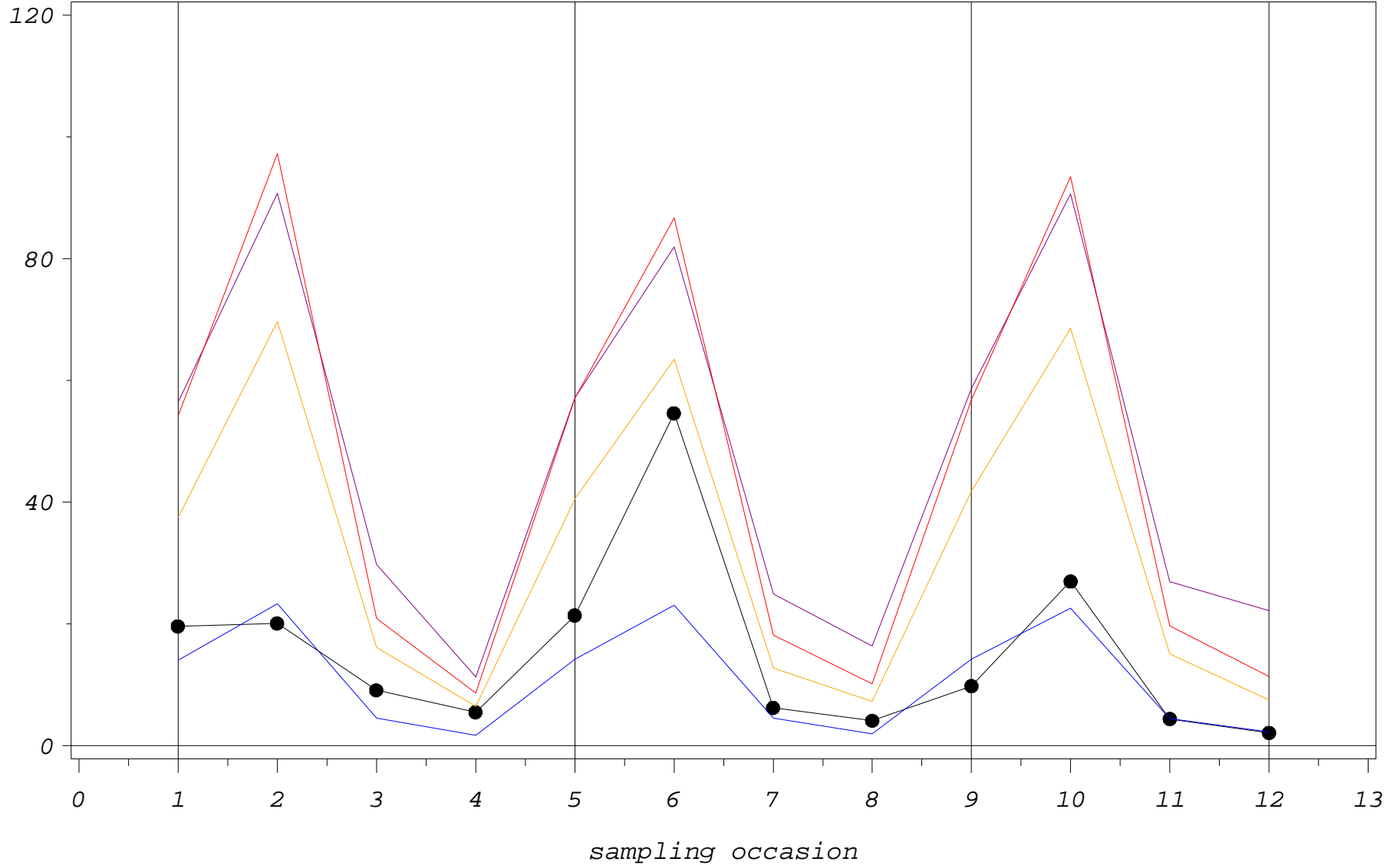
CODE=H03913



Study 2: cortisol single profiles with outlier fences

CODE=H04103

cortisol (nmol/l)

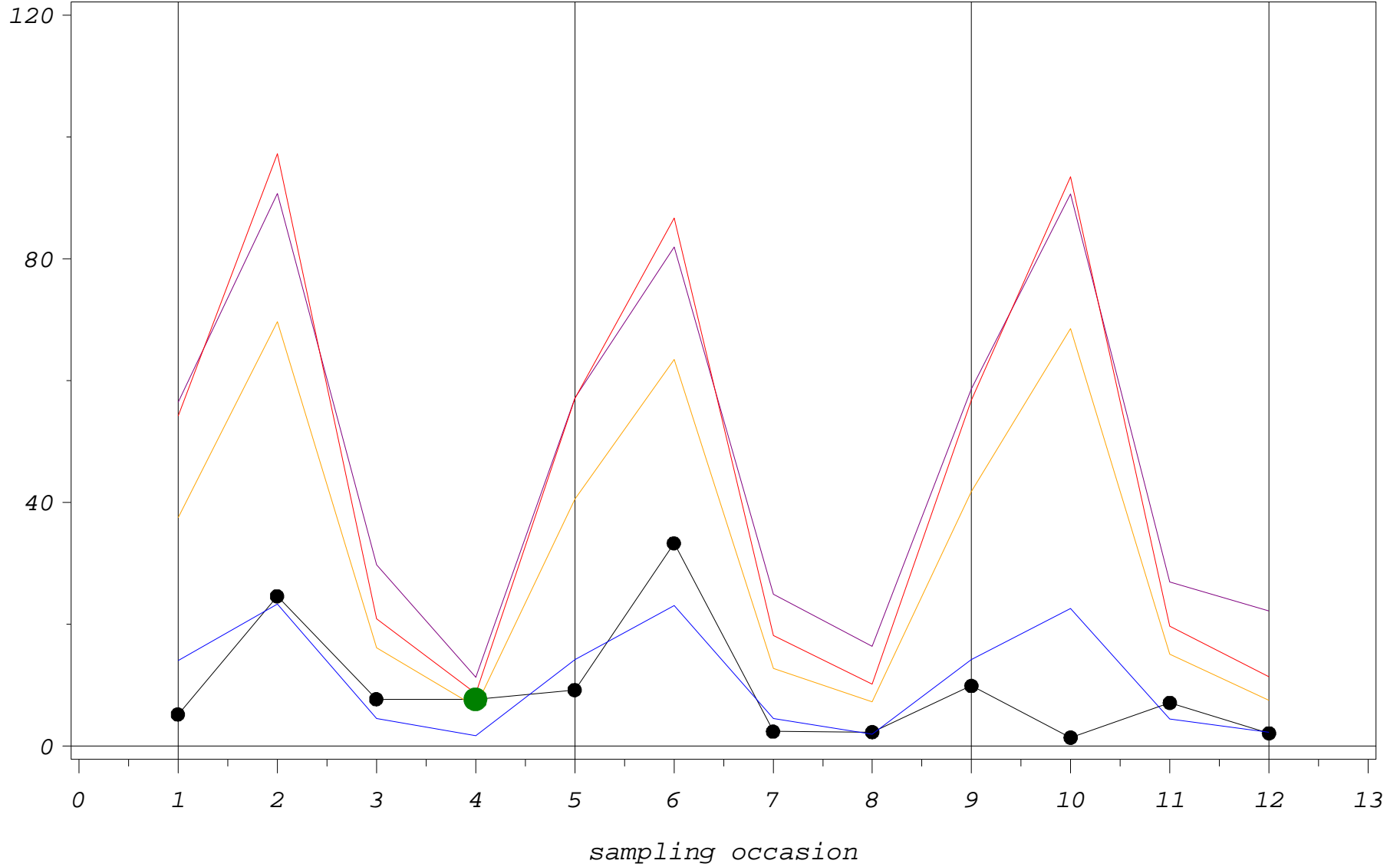


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ●●● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H04104

cortisol (nmol/l)

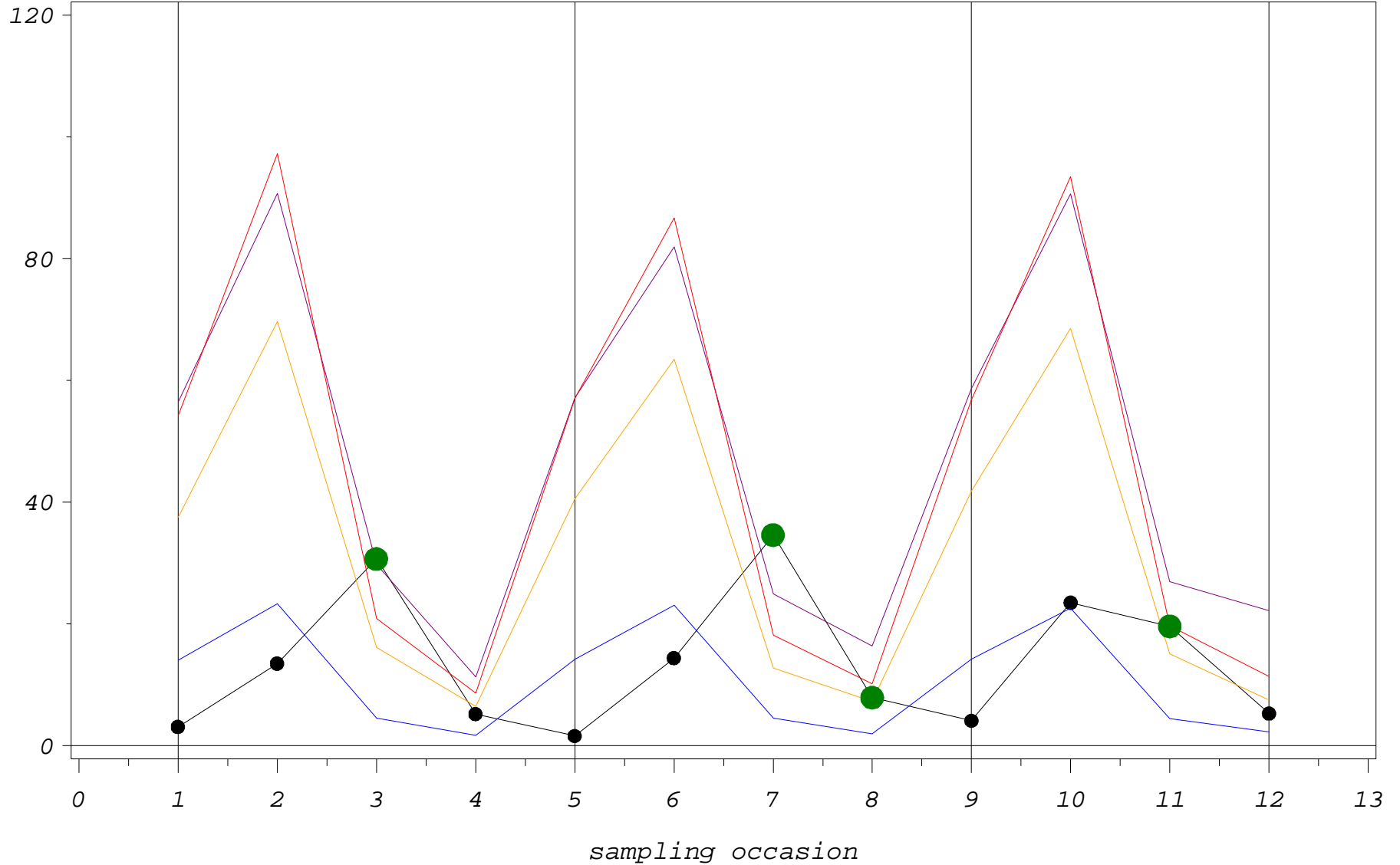


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H04105

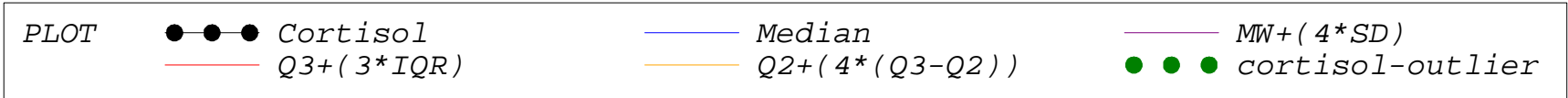
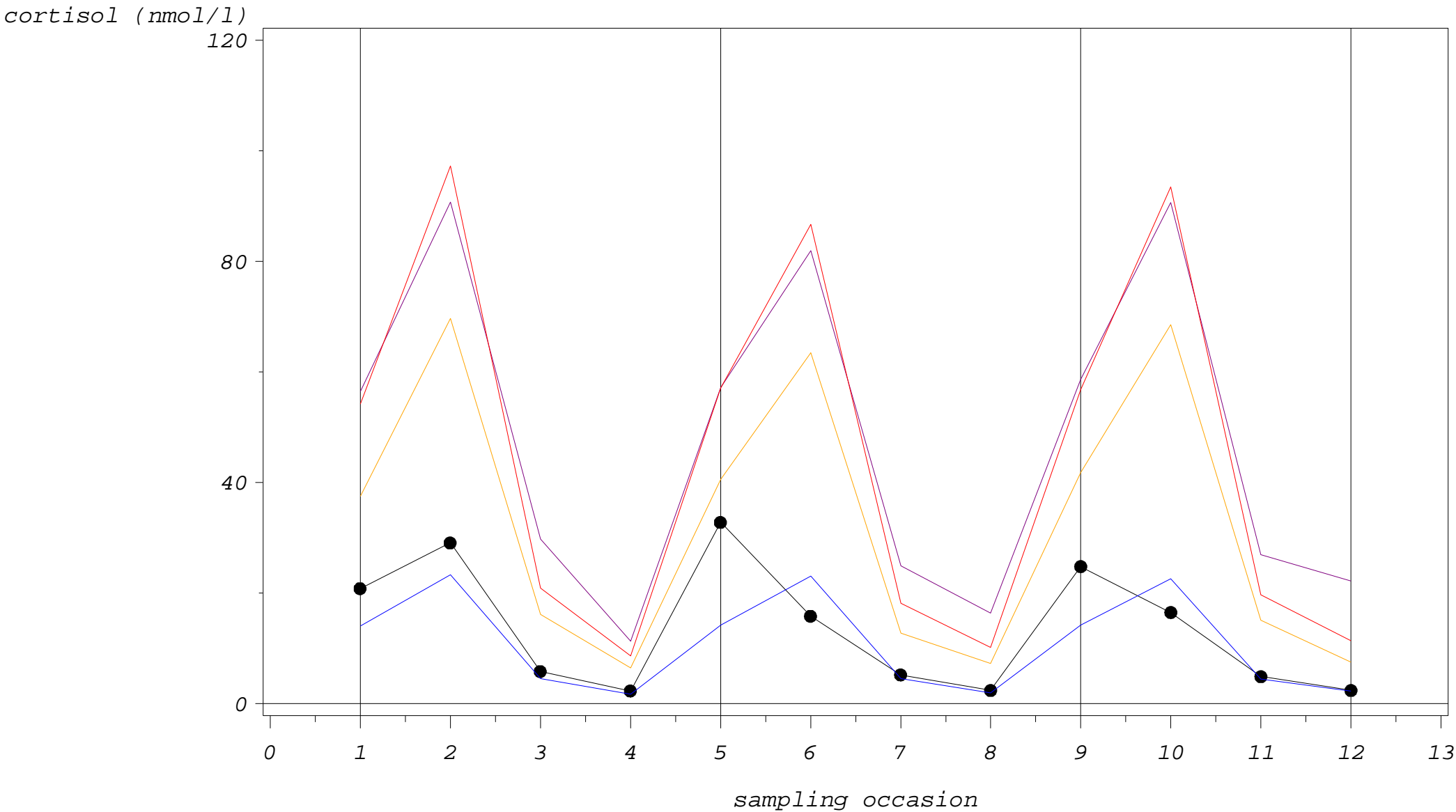
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

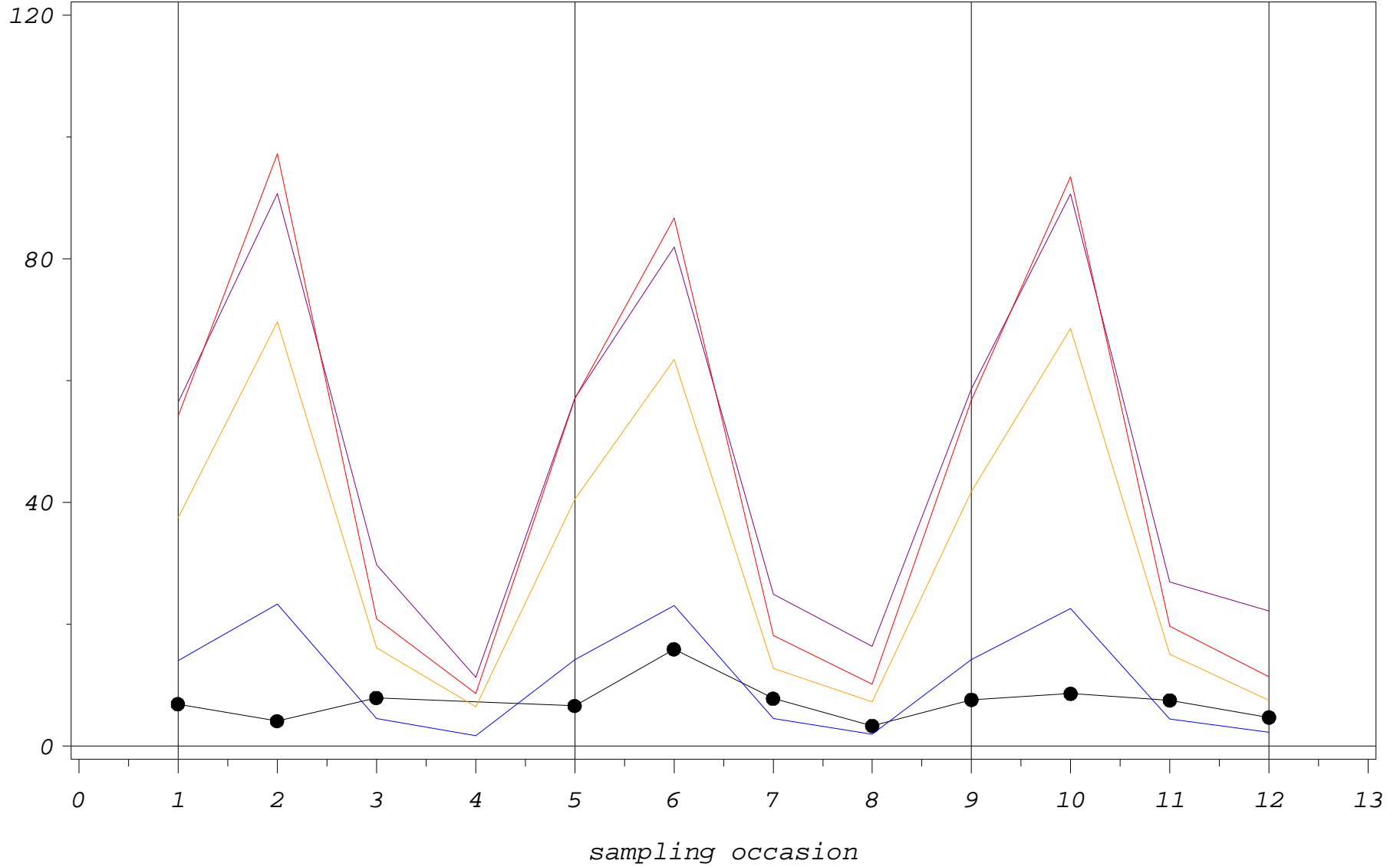
CODE=H04107



Study 2: cortisol single profiles with outlier fences

CODE=H04108

cortisol (nmol/l)

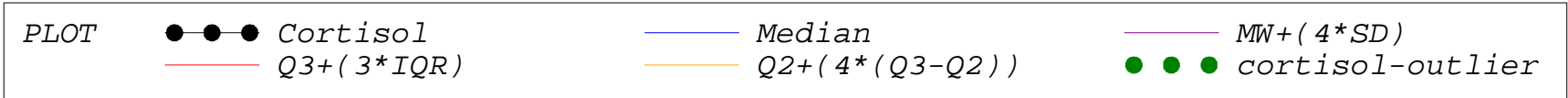
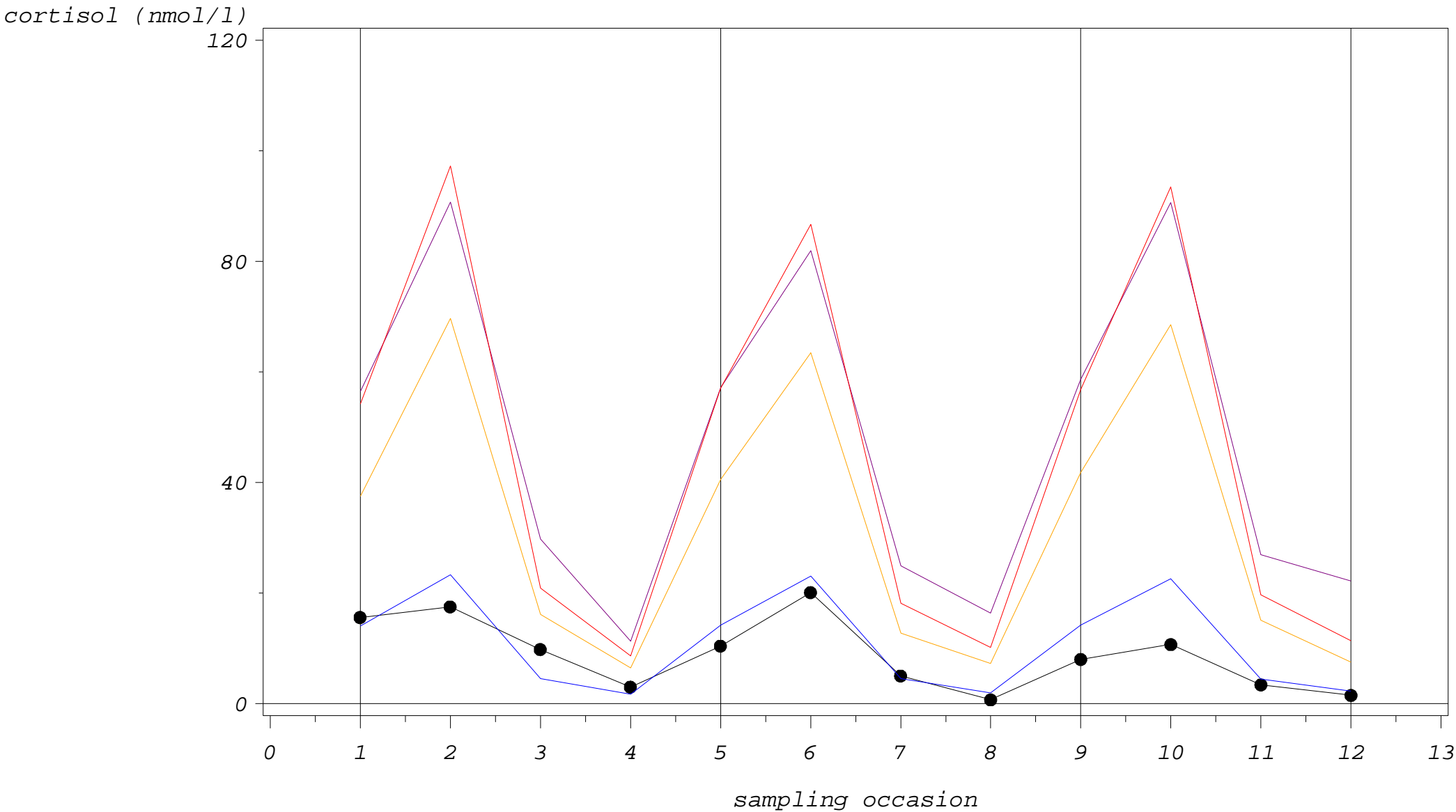


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

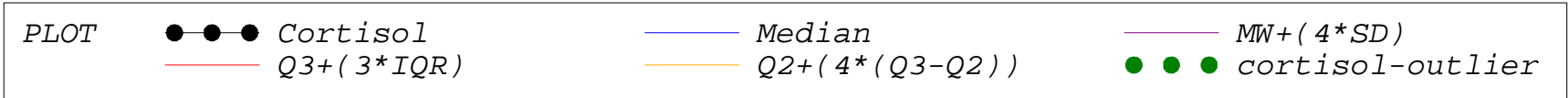
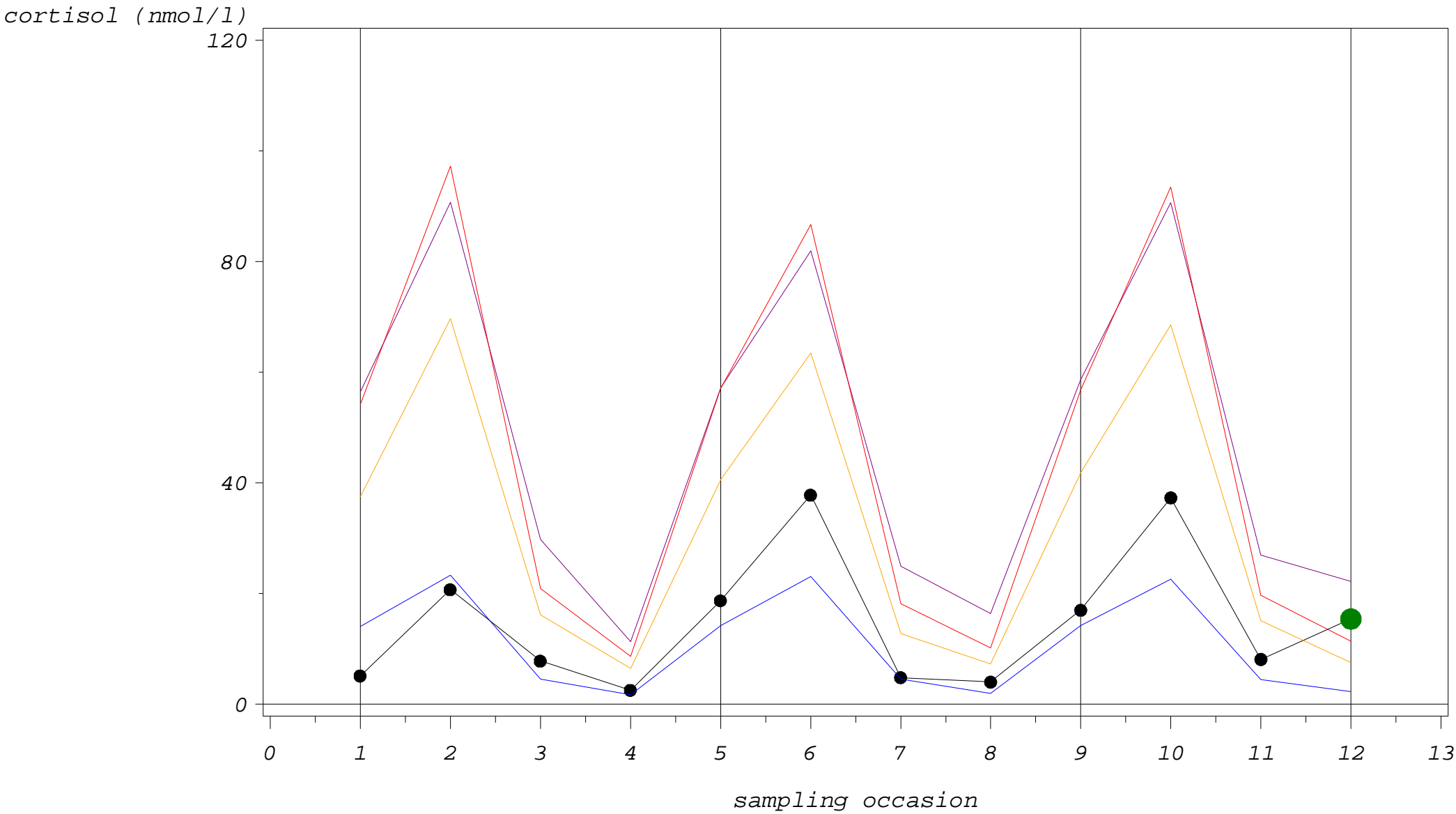
Study 2: cortisol single profiles with outlier fences

CODE=H04109



Study 2: cortisol single profiles with outlier fences

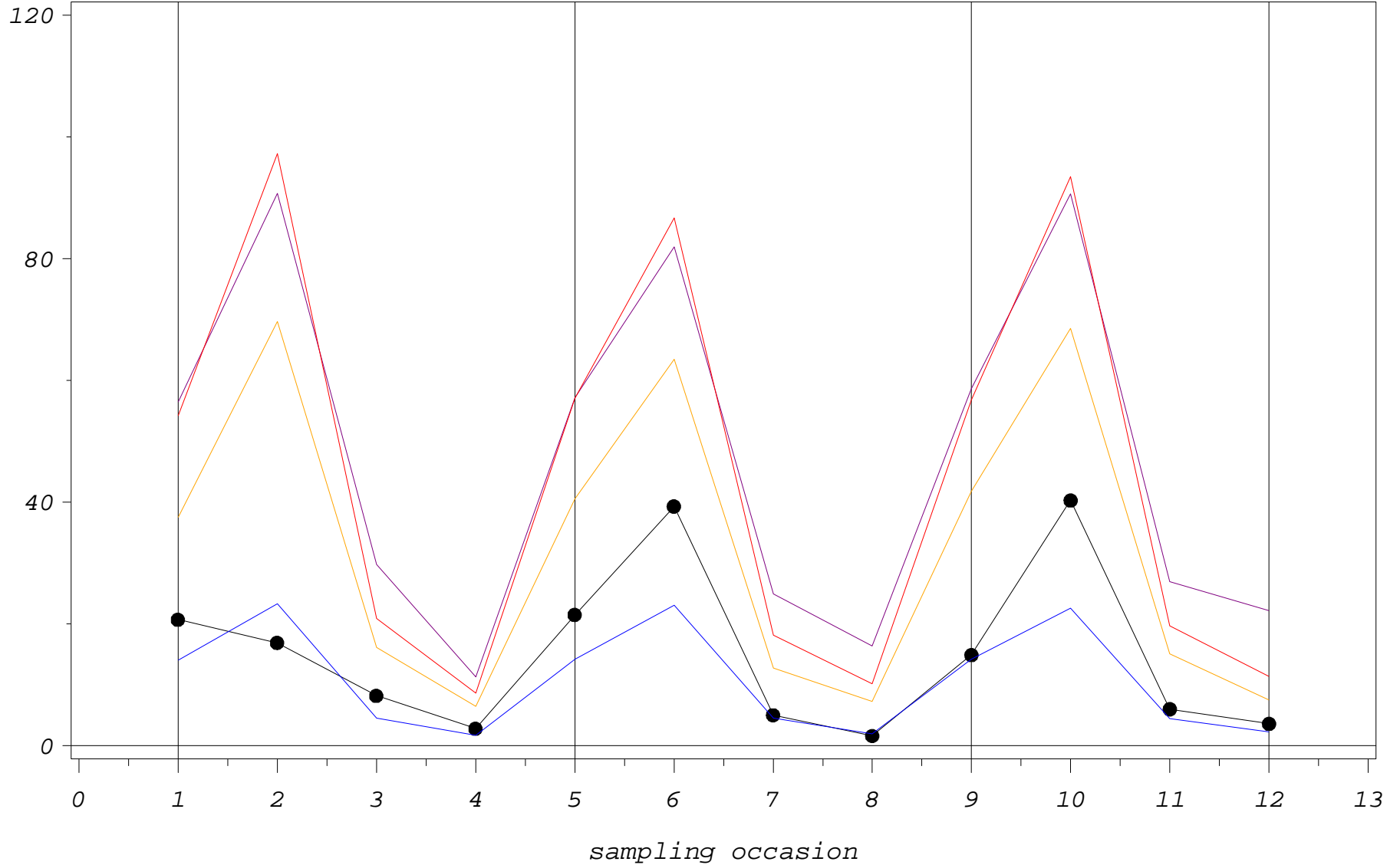
CODE=H04110



Study 2: cortisol single profiles with outlier fences

CODE=H04111

cortisol (nmol/l)

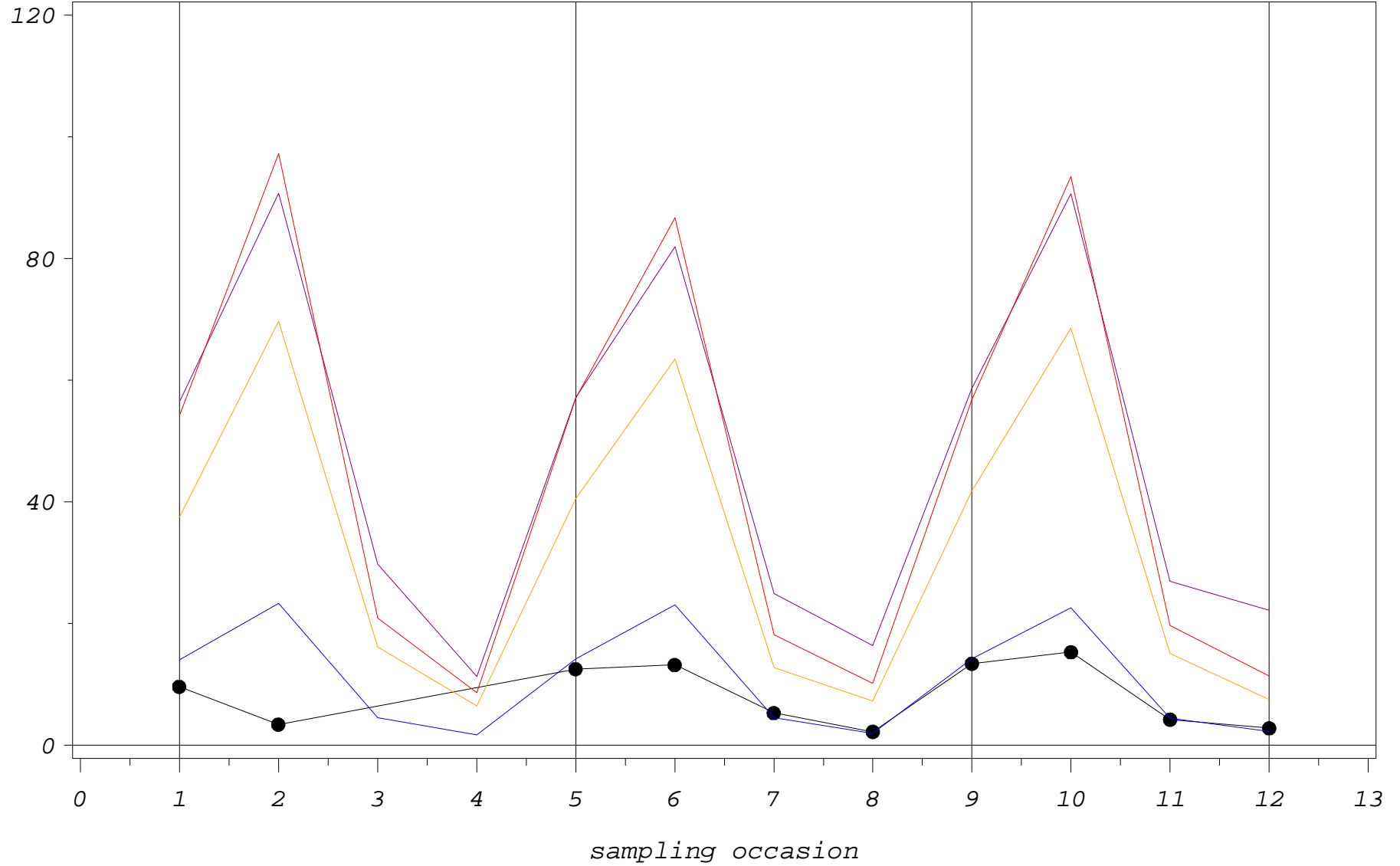


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H04112

cortisol (nmol/l)

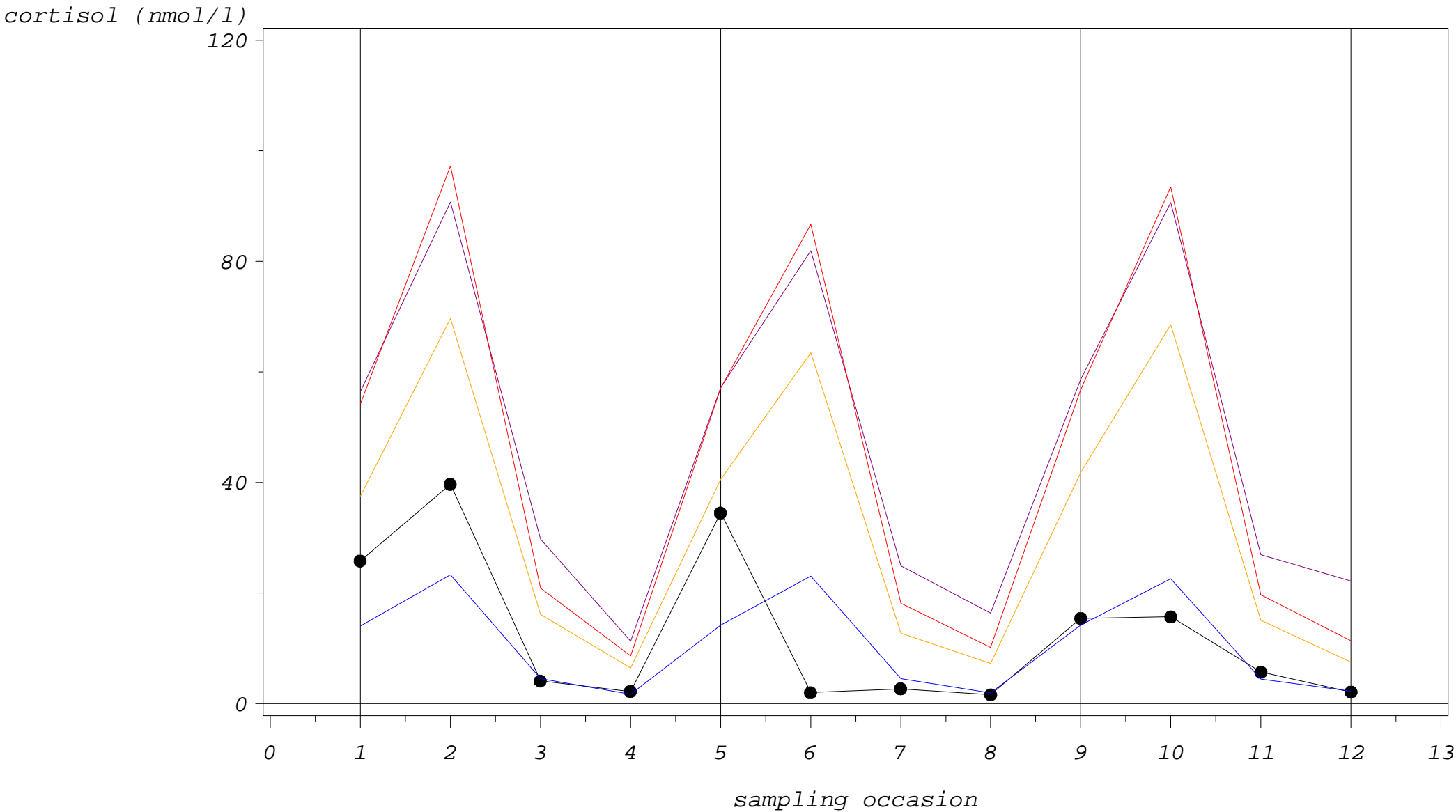


PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

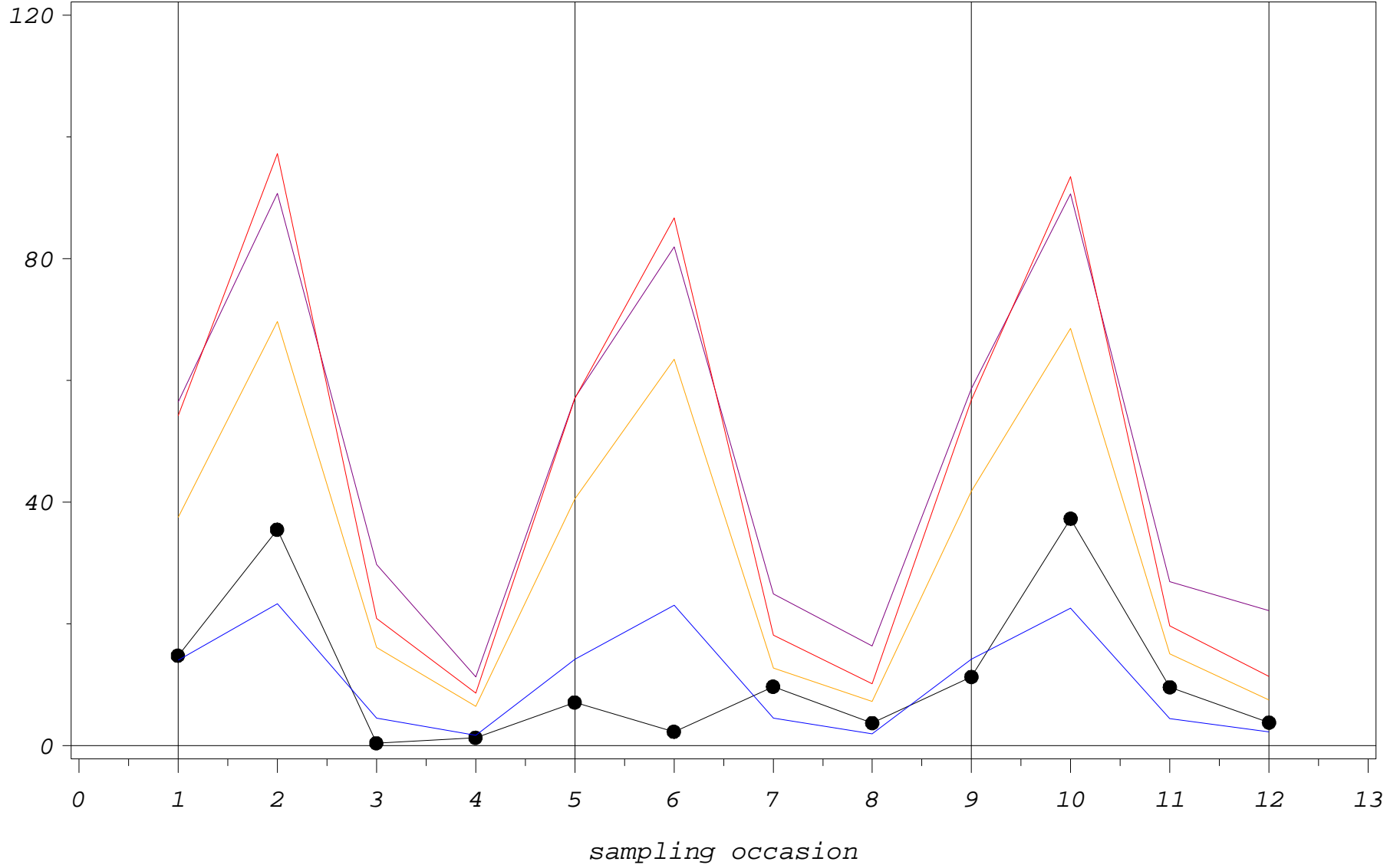
CODE=H04113



Study 2: cortisol single profiles with outlier fences

CODE=H04116

cortisol (nmol/l)

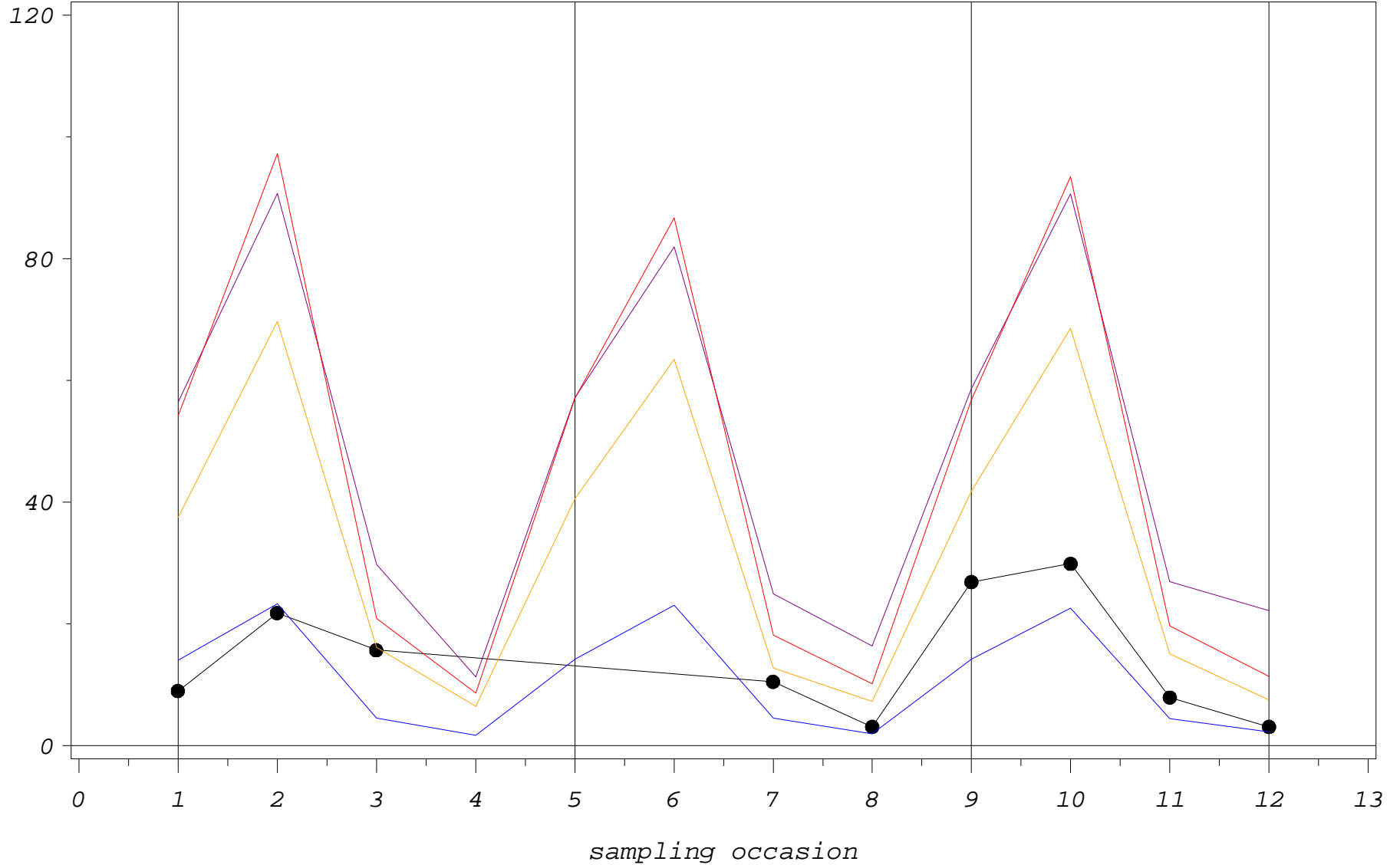


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H04117

cortisol (nmol/l)



PLOT

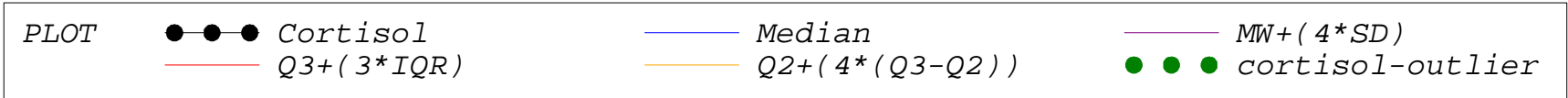
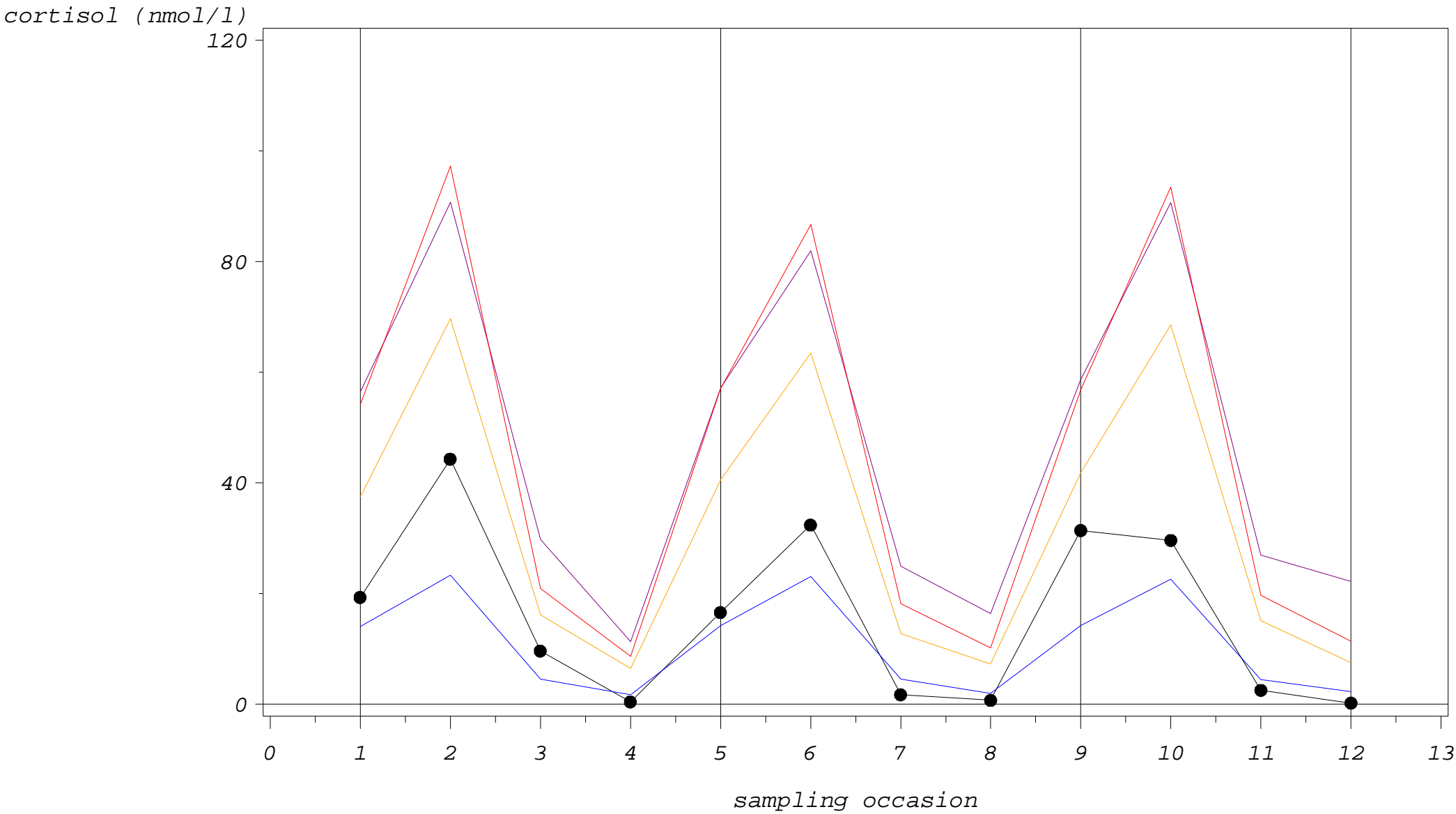
●—● Cortisol
— Q3+(3*IQR)

— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
●●● cortisol-outlier

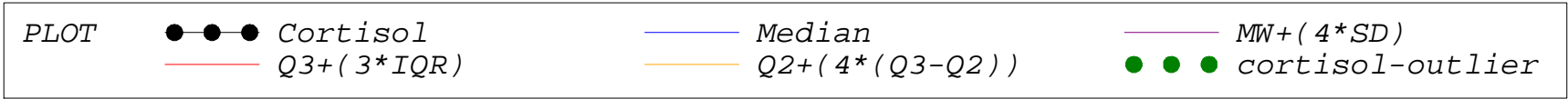
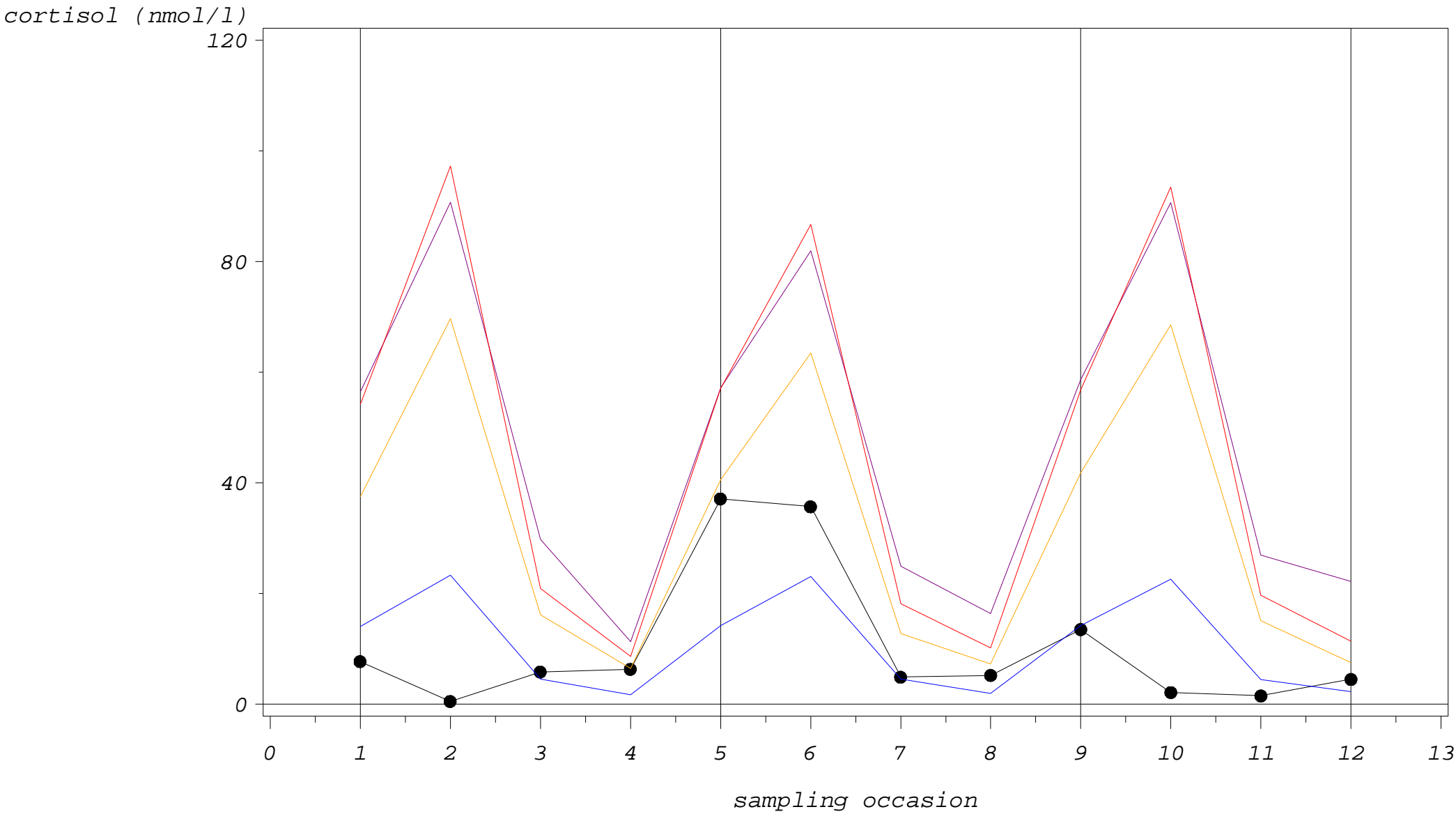
Study 2: cortisol single profiles with outlier fences

CODE=H04118



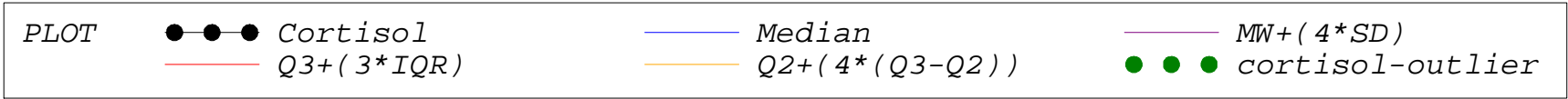
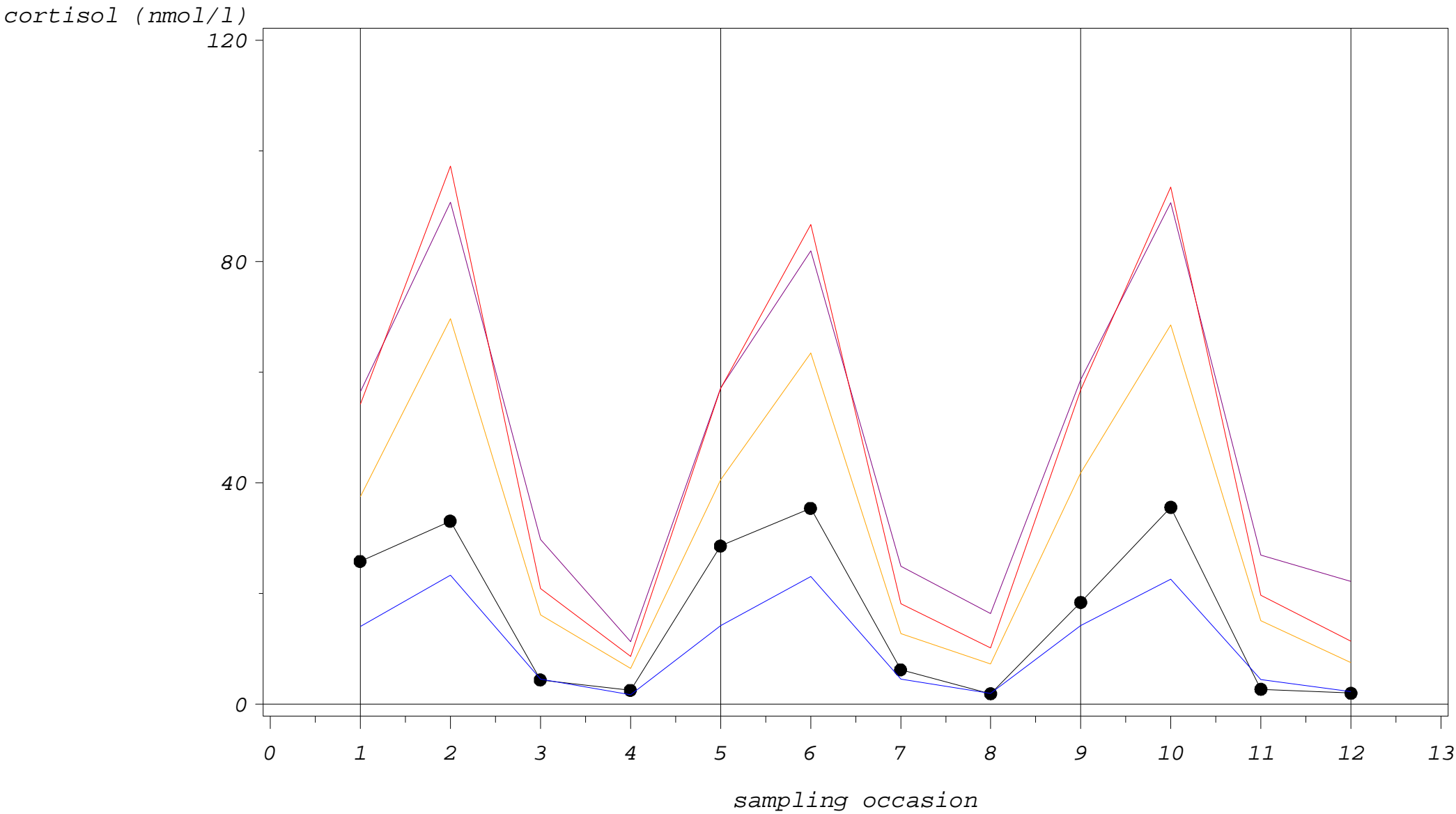
Study 2: cortisol single profiles with outlier fences

CODE=H04119



Study 2: cortisol single profiles with outlier fences

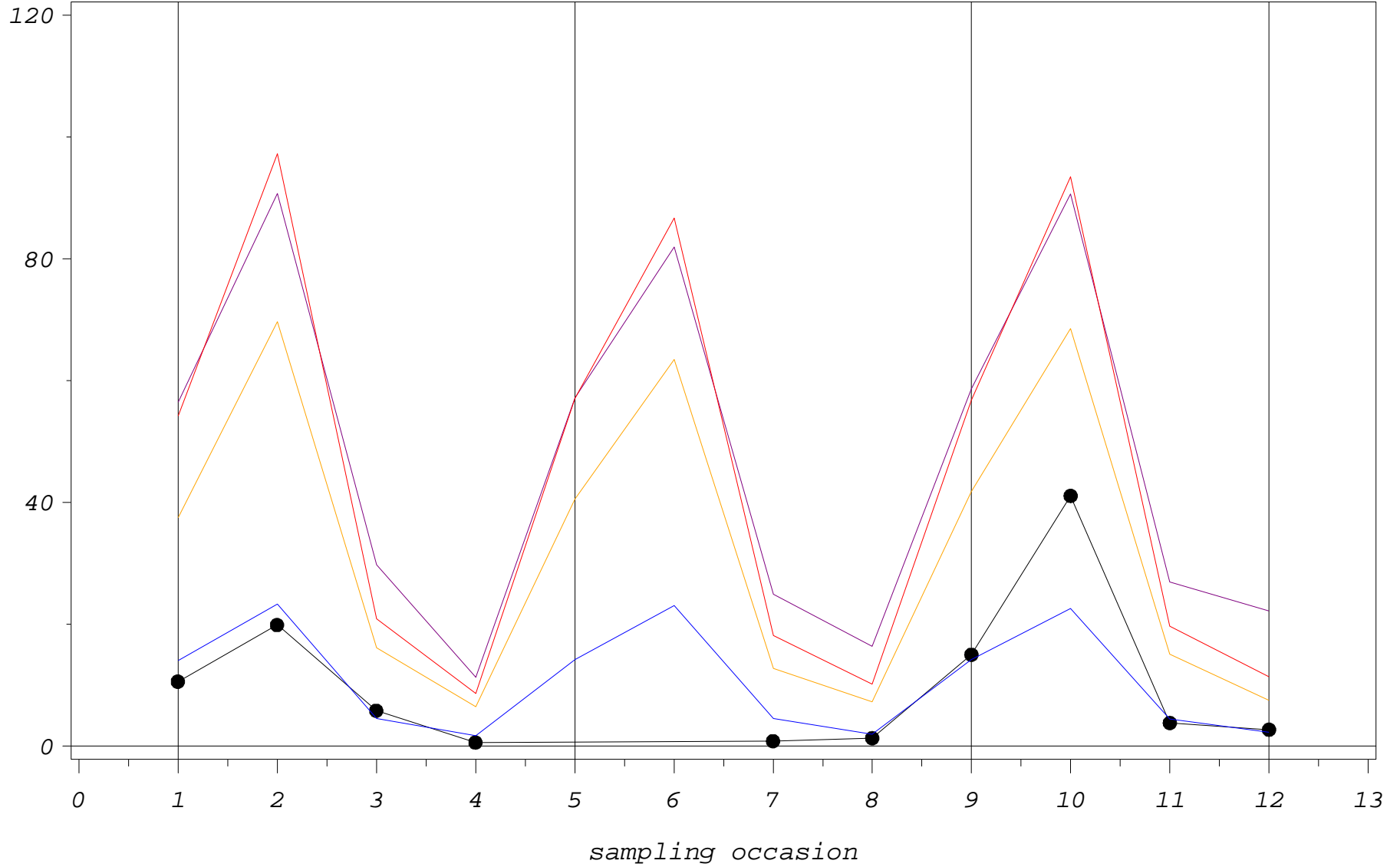
CODE=H04120



Study 2: cortisol single profiles with outlier fences

CODE=H04121

cortisol (nmol/l)



PLOT

●—●—● Cortisol
— Q3+(3*IQR)

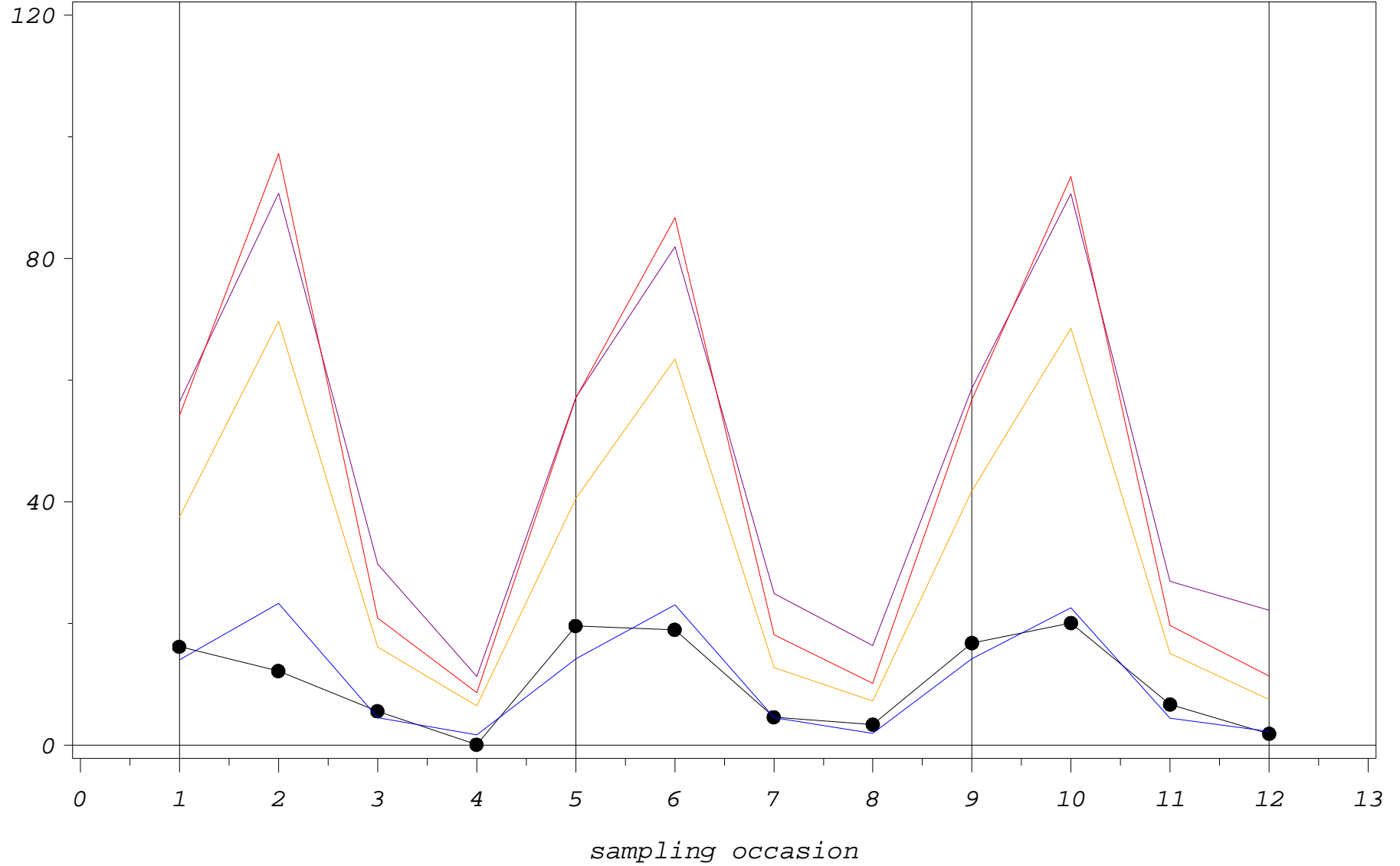
— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H04122

cortisol (nmol/l)

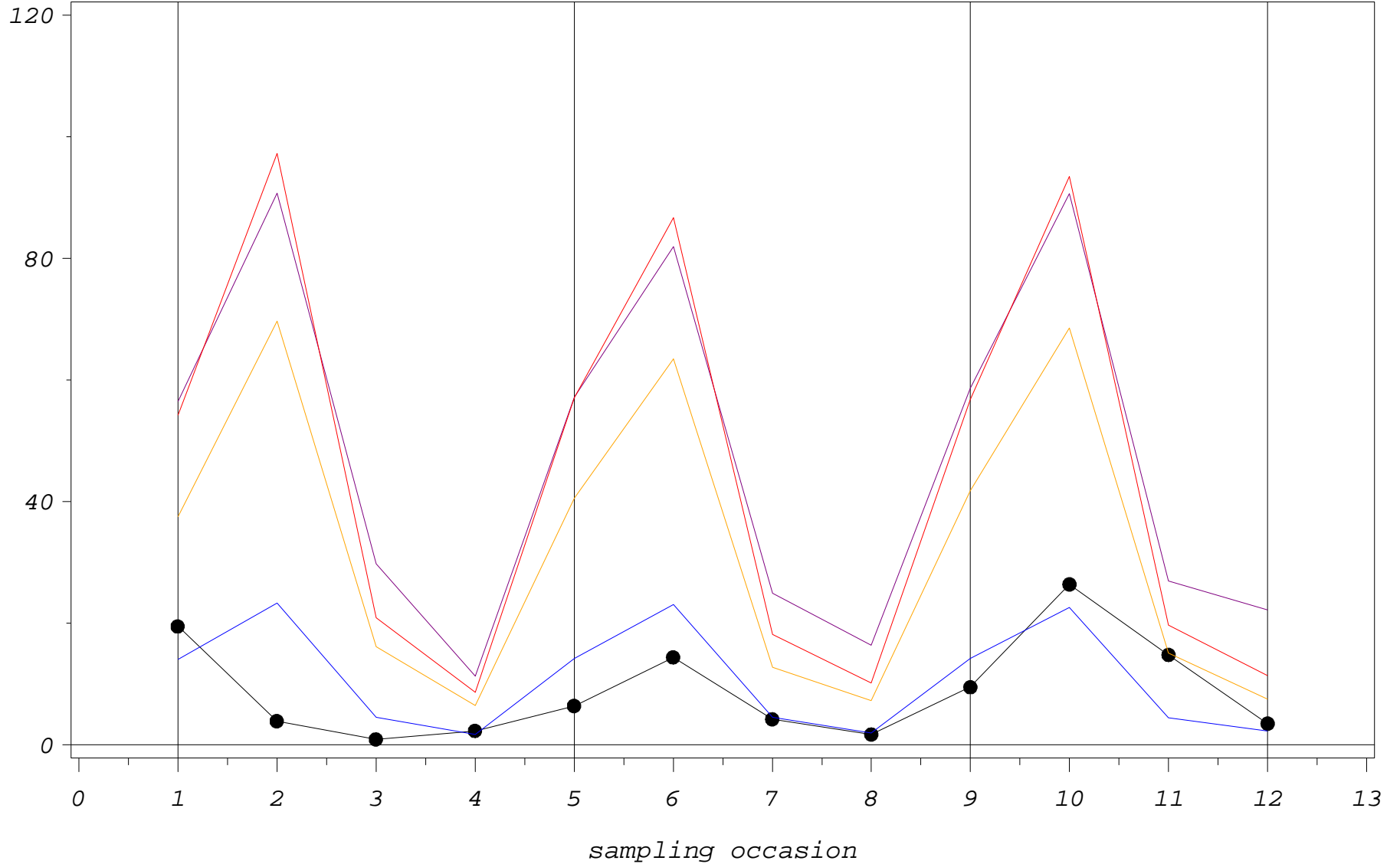


PLOT	●—●—●	Cortisol	—	Median	—	$MW + (4 * SD)$
	—	$Q3 + (3 * IQR)$	—	$Q2 + (4 * (Q3 - Q2))$	● ● ●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H04123

cortisol (nmol/l)

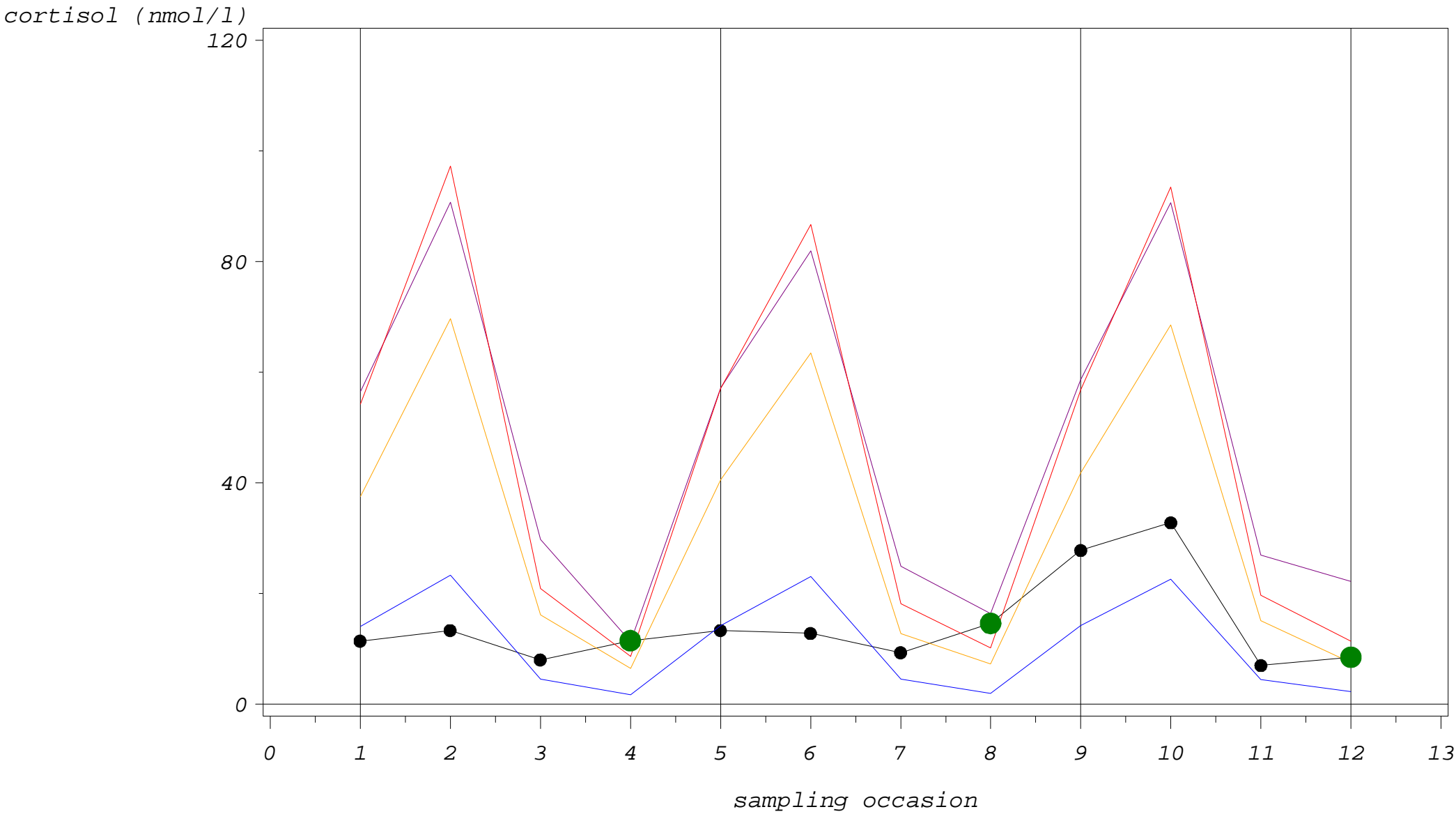


PLOT

●—●—●	Cortisol	—	Median	—	$MW + (4 \times SD)$
—	$Q3 + (3 \times IQR)$	—	$Q2 + (4 \times (Q3 - Q2))$	●●●	cortisol-outlier

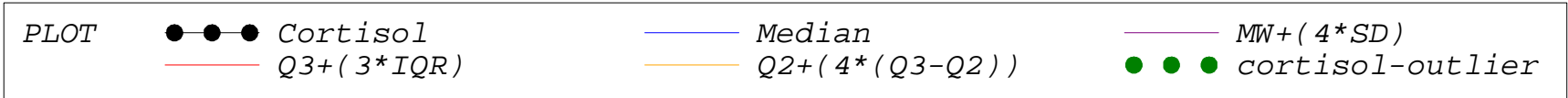
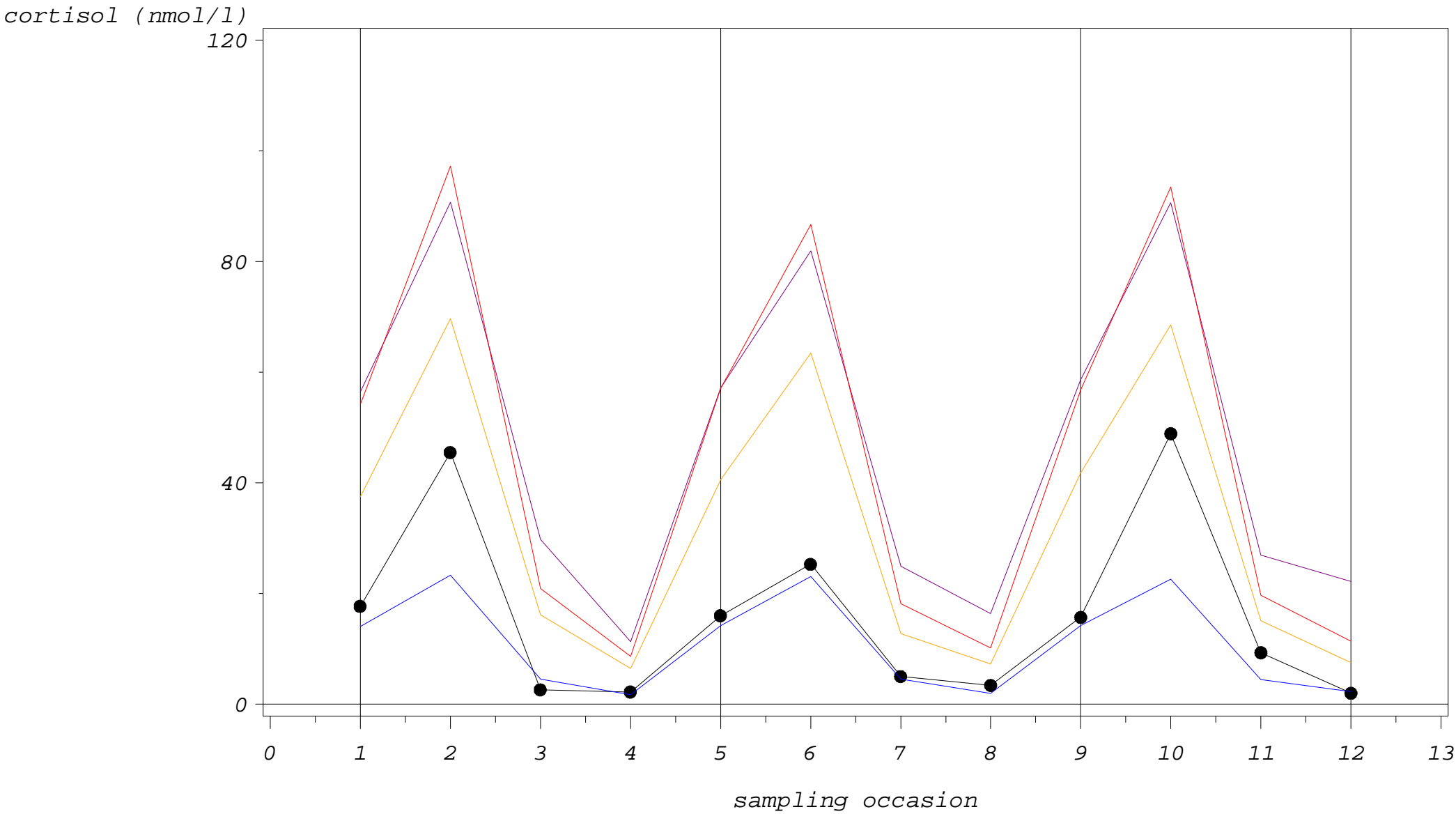
Study 2: cortisol single profiles with outlier fences

CODE=H04124



Study 2: cortisol single profiles with outlier fences

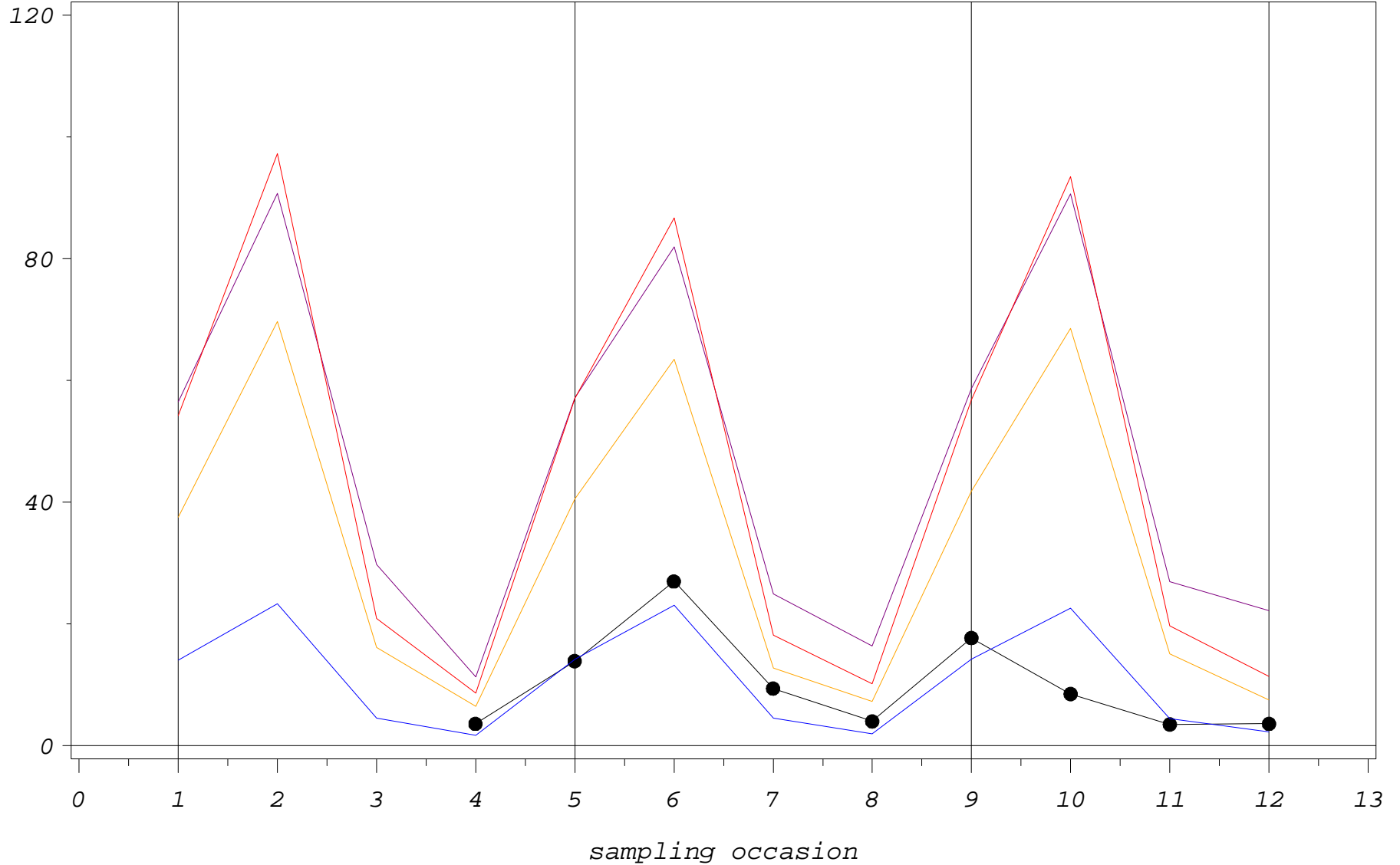
CODE=H04401



Study 2: cortisol single profiles with outlier fences

CODE=H04402

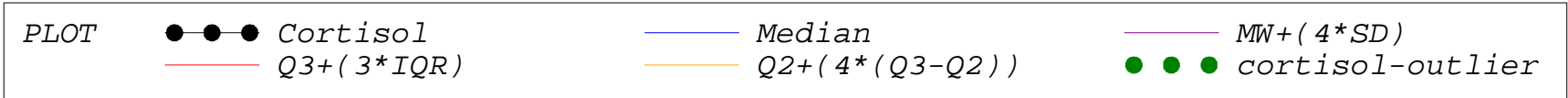
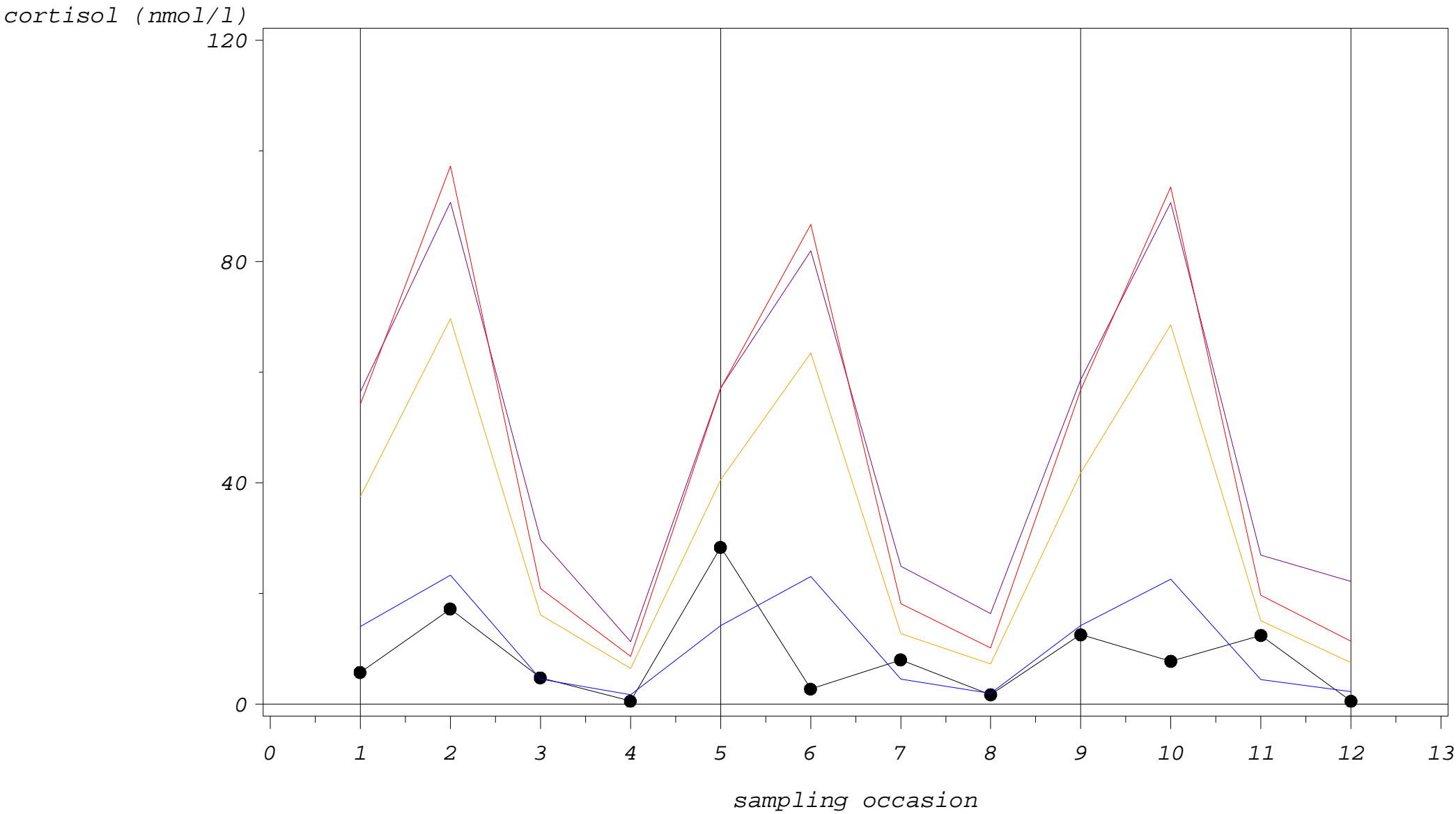
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW+(4*SD)$
 — $Q3+(3*IQR)$ — $Q2+(4*(Q3-Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

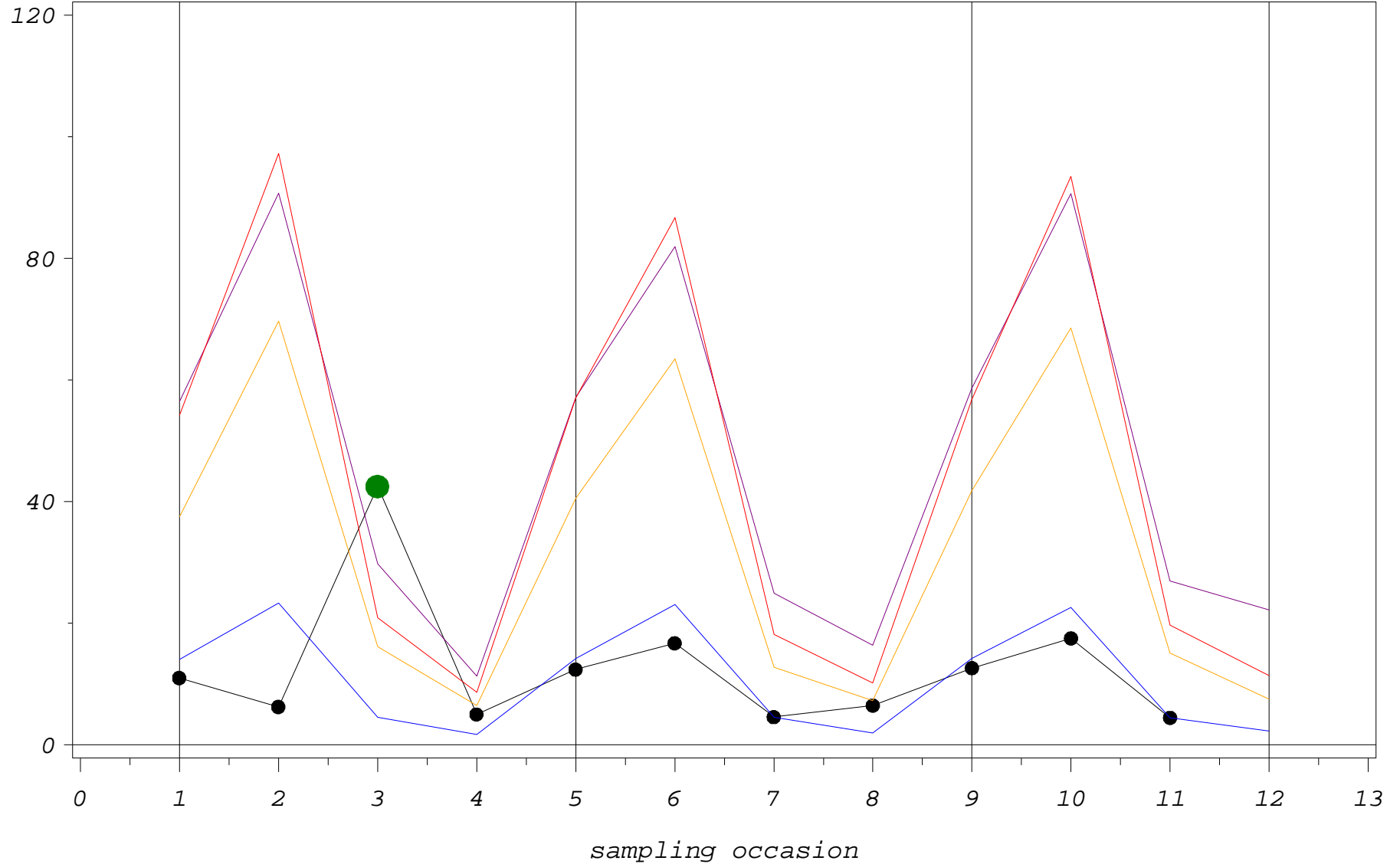
CODE=H04601



Study 2: cortisol single profiles with outlier fences

CODE=H04602

cortisol (nmol/l)

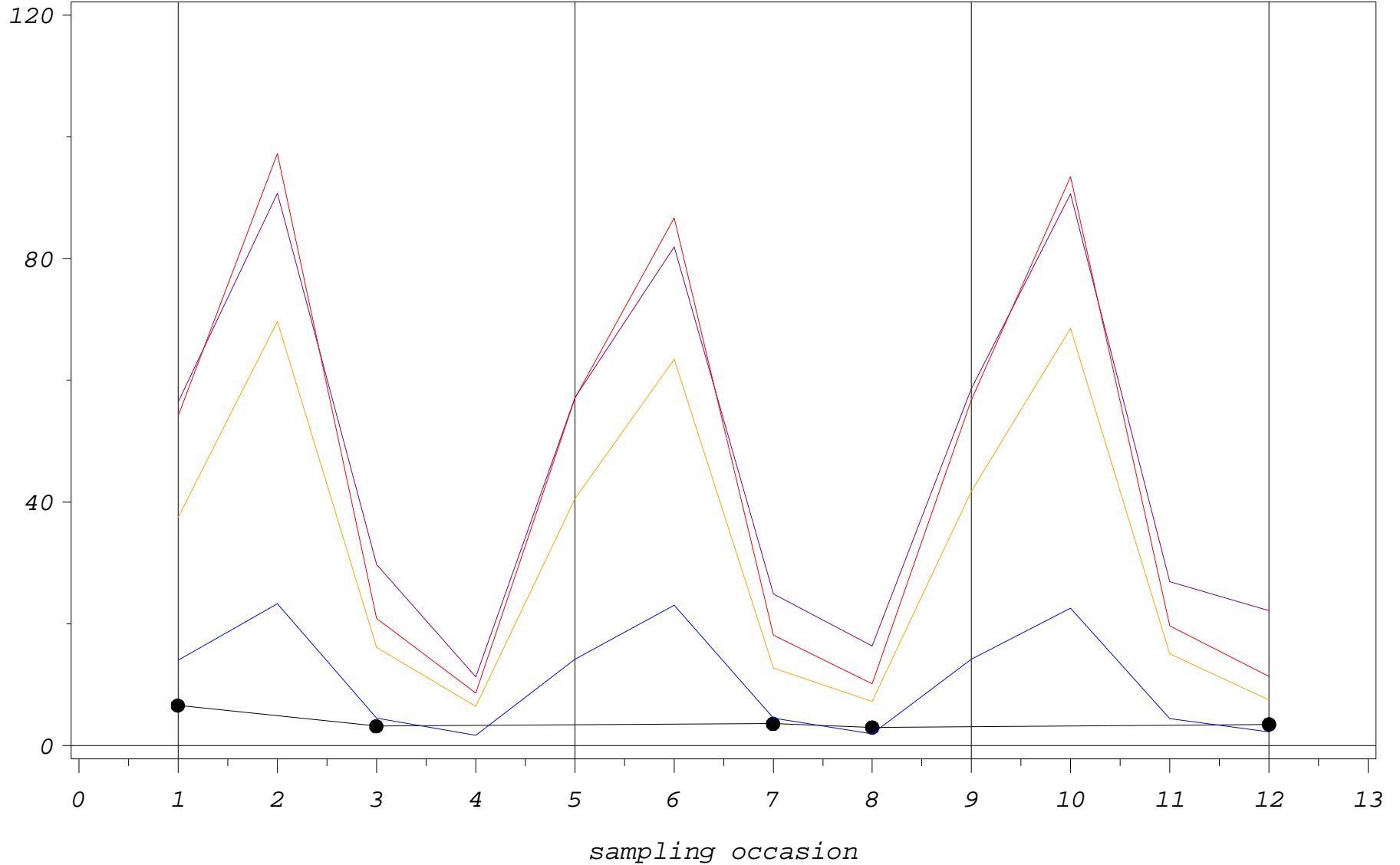


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H04603

cortisol (nmol/l)

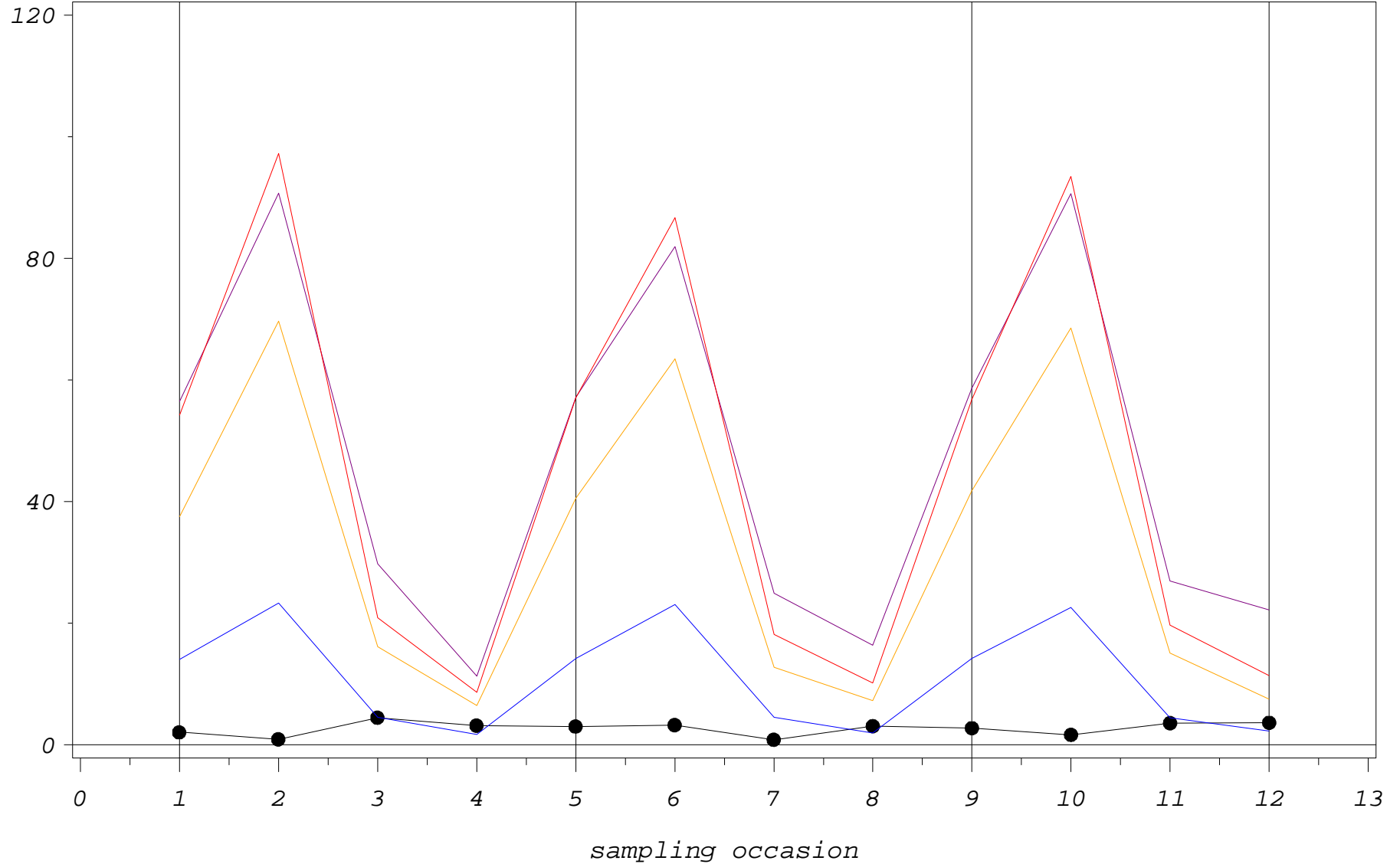


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H04604

cortisol (nmol/l)

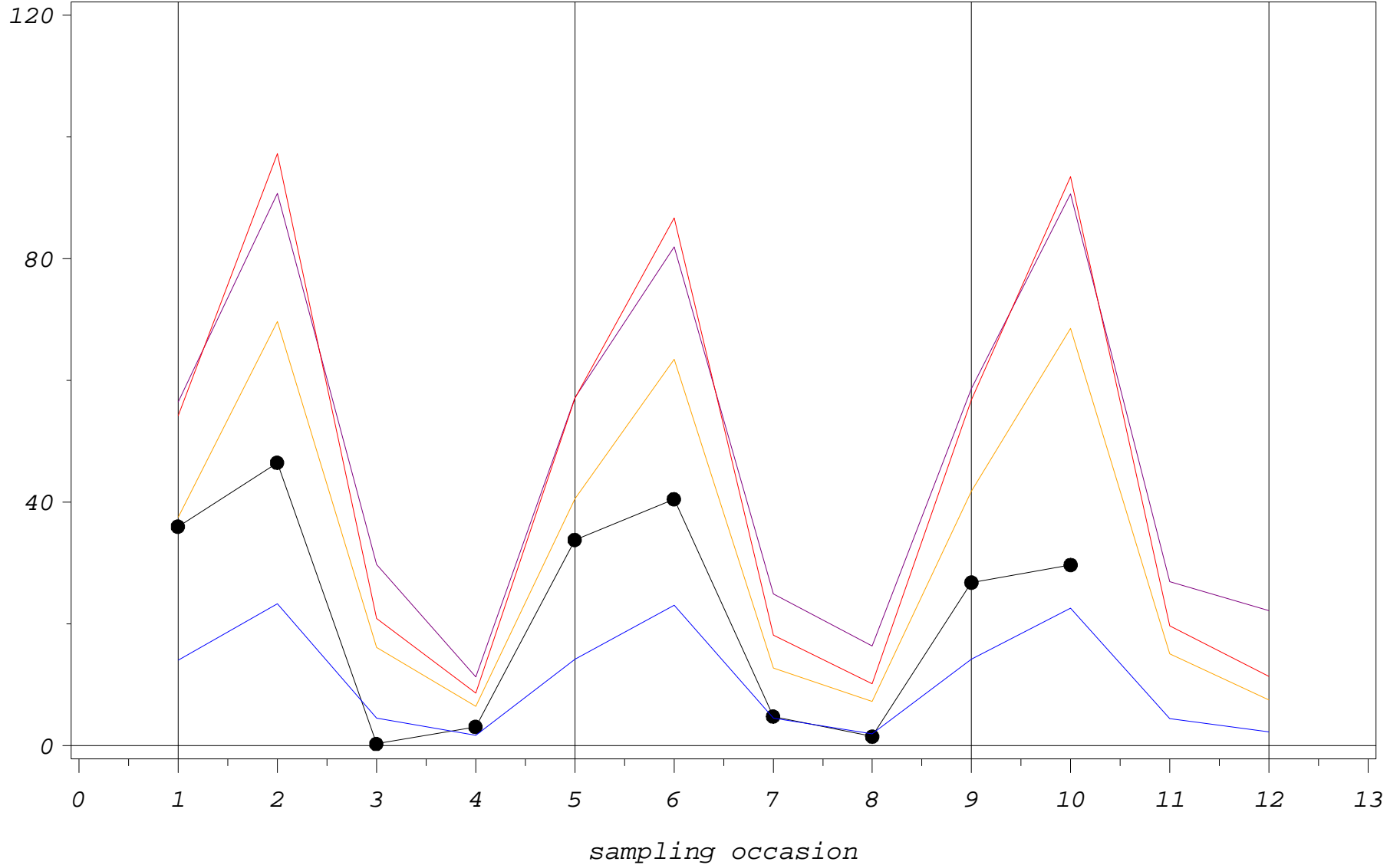


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H04605

cortisol (nmol/l)

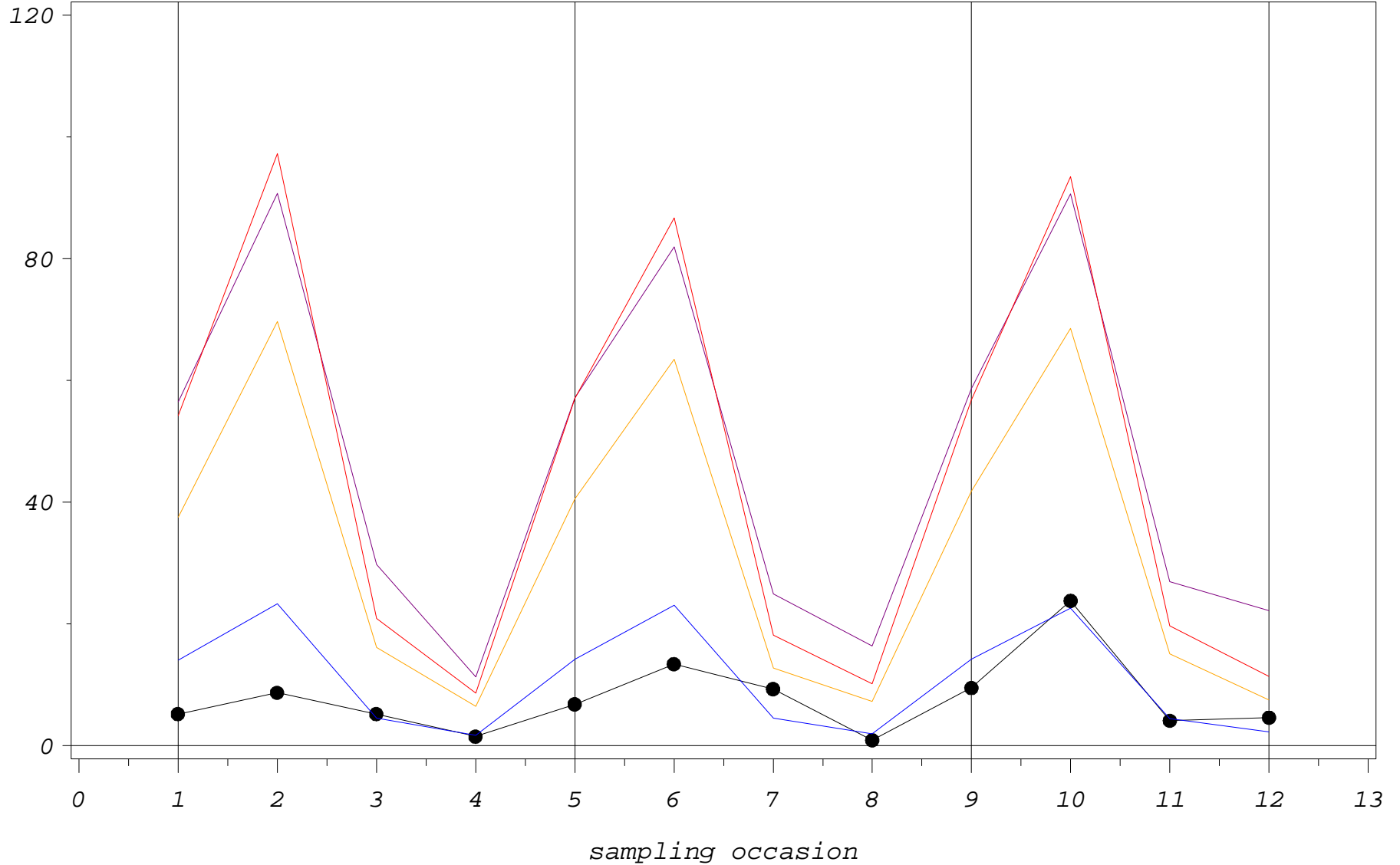


PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H04606

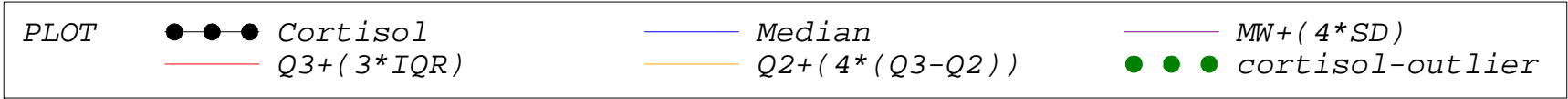
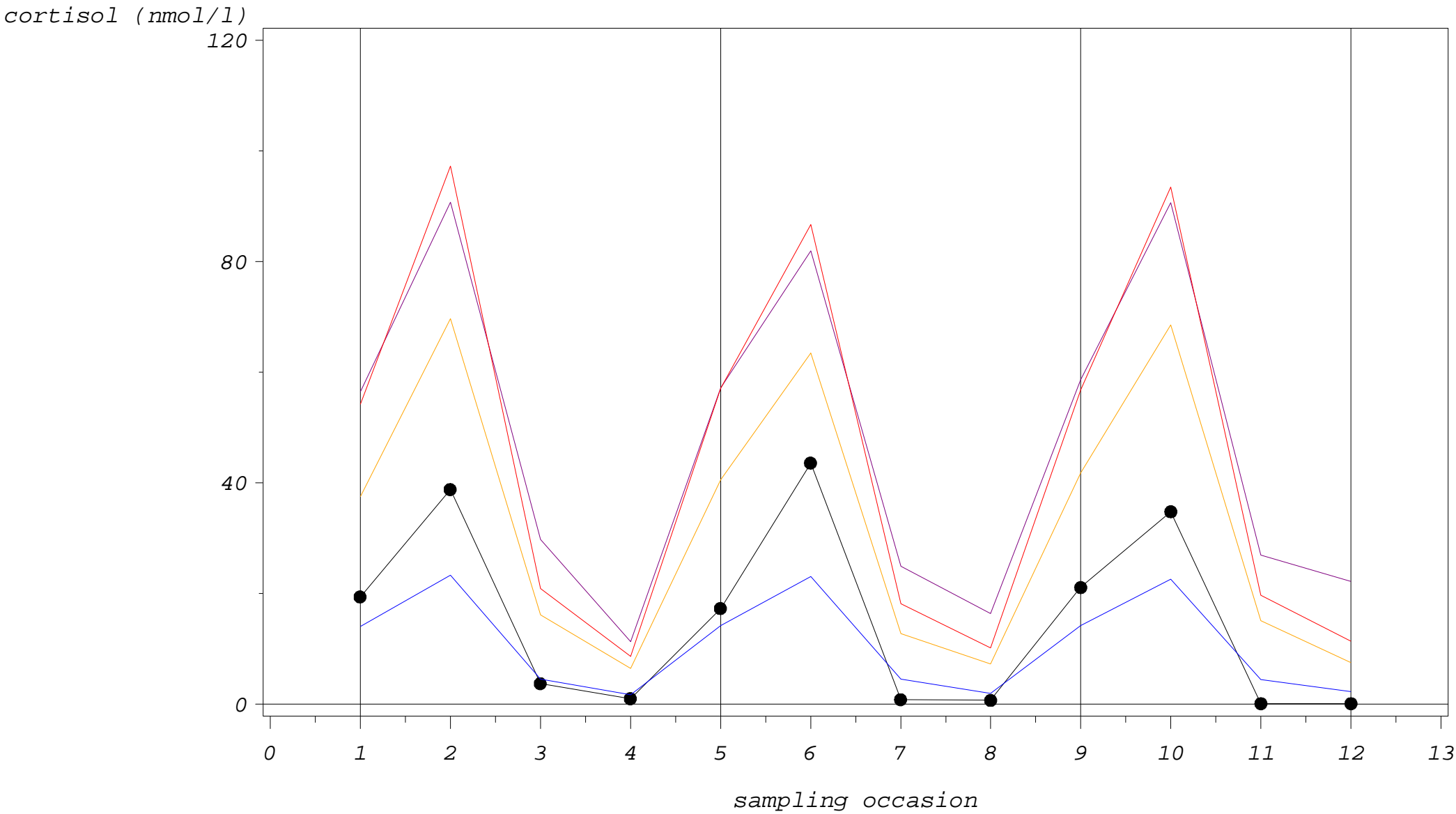
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

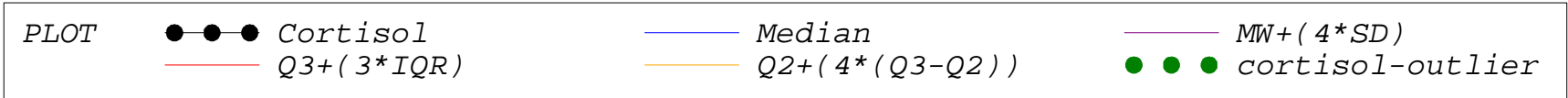
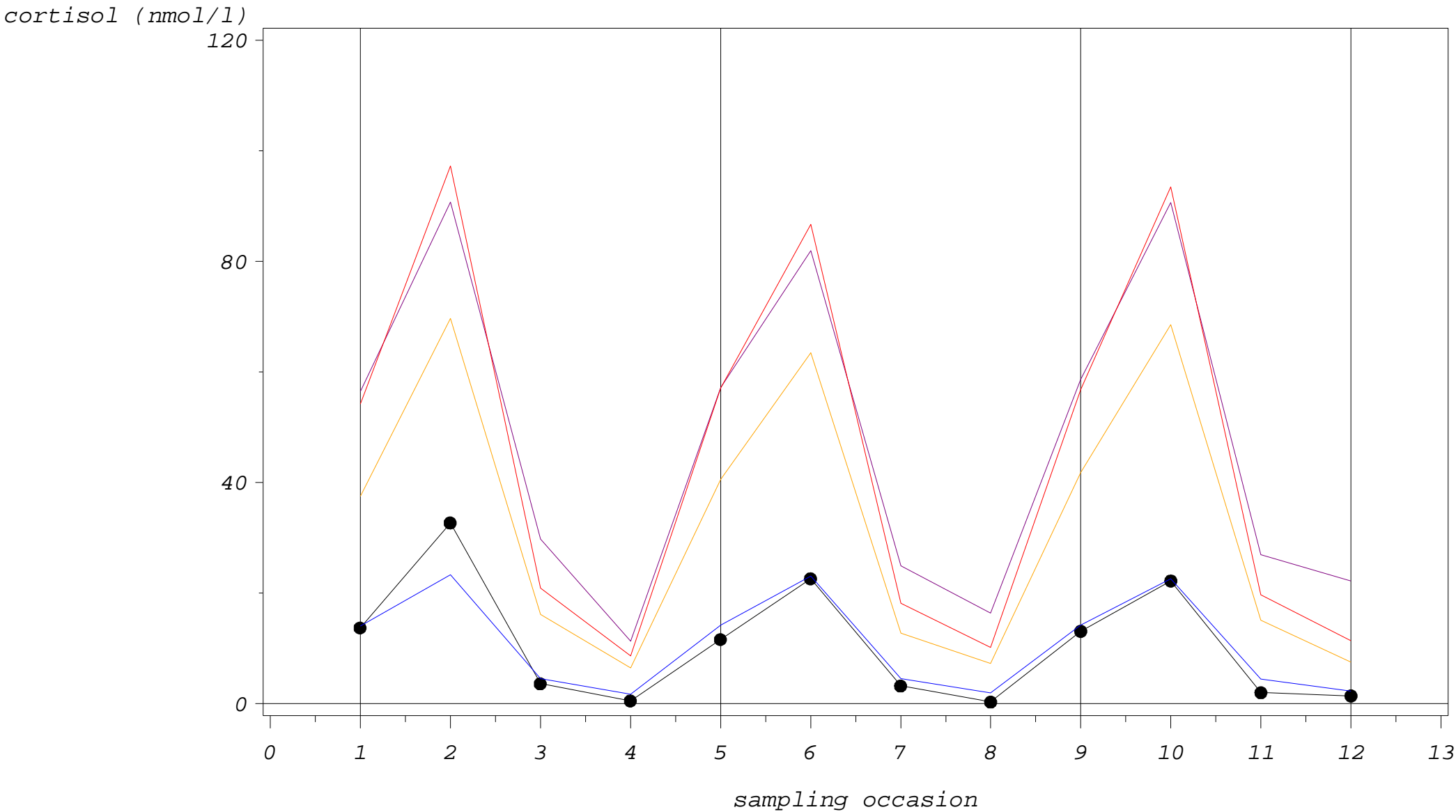
Study 2: cortisol single profiles with outlier fences

CODE=H04607



Study 2: cortisol single profiles with outlier fences

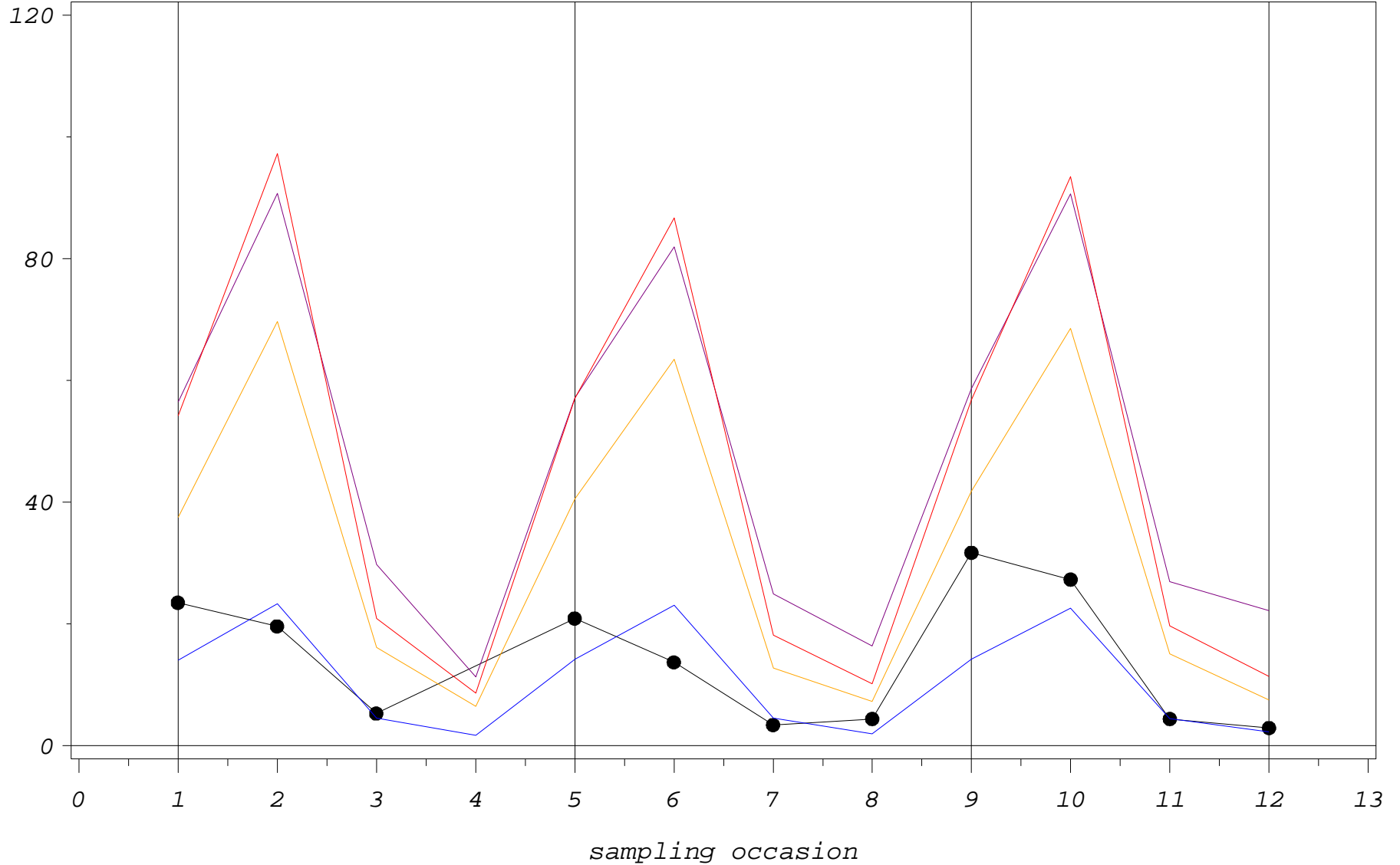
CODE=H04608



Study 2: cortisol single profiles with outlier fences

CODE=H31012

cortisol (nmol/l)



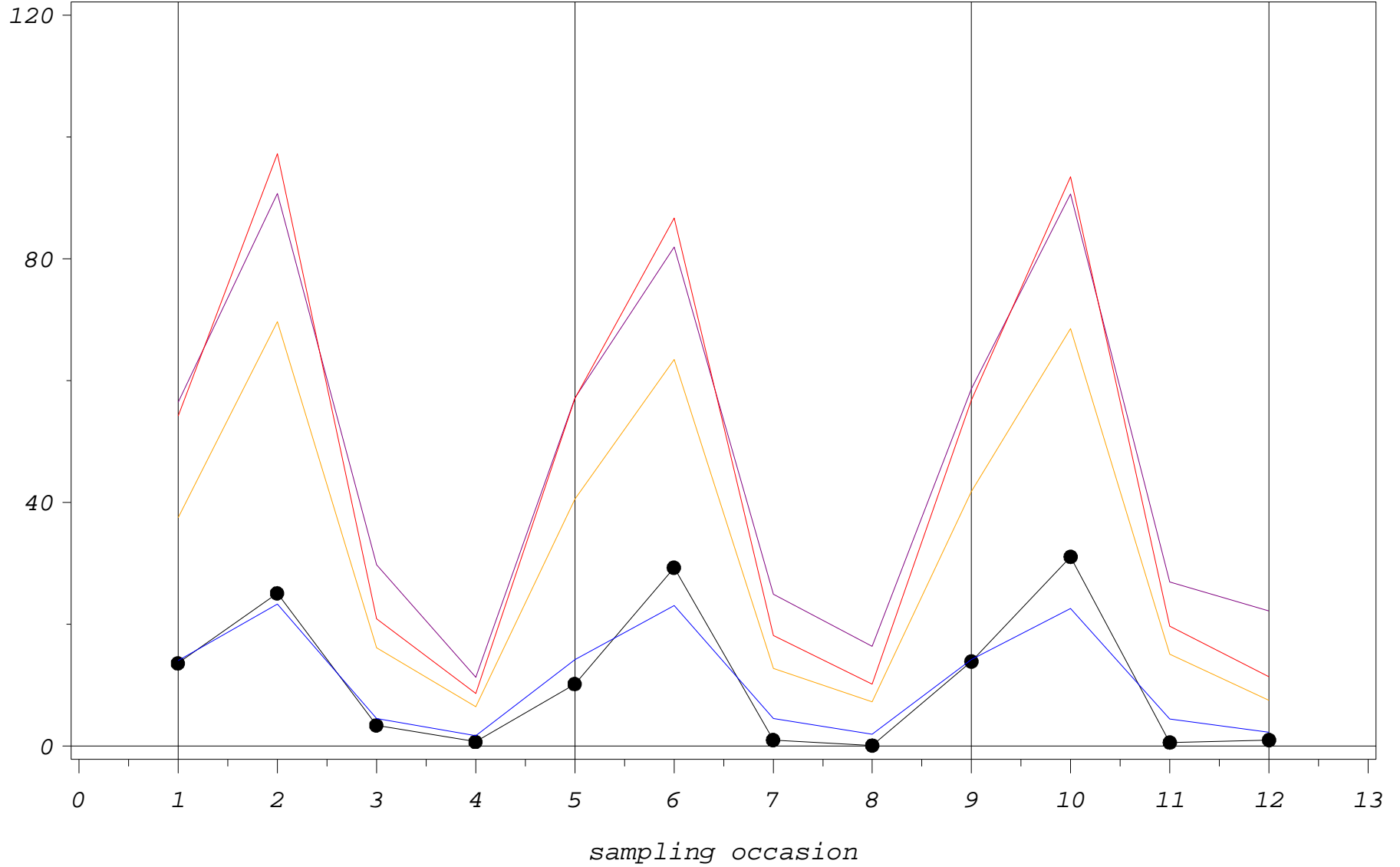
PLOT

●—●—●	Cortisol	—	Median	—	MW+(4*SD)
—	Q3+(3*IQR)	—	Q2+(4*(Q3-Q2))	●●●	cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H31022

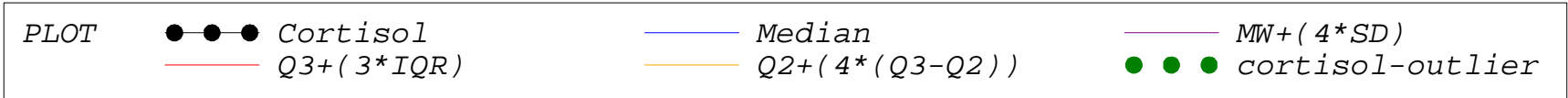
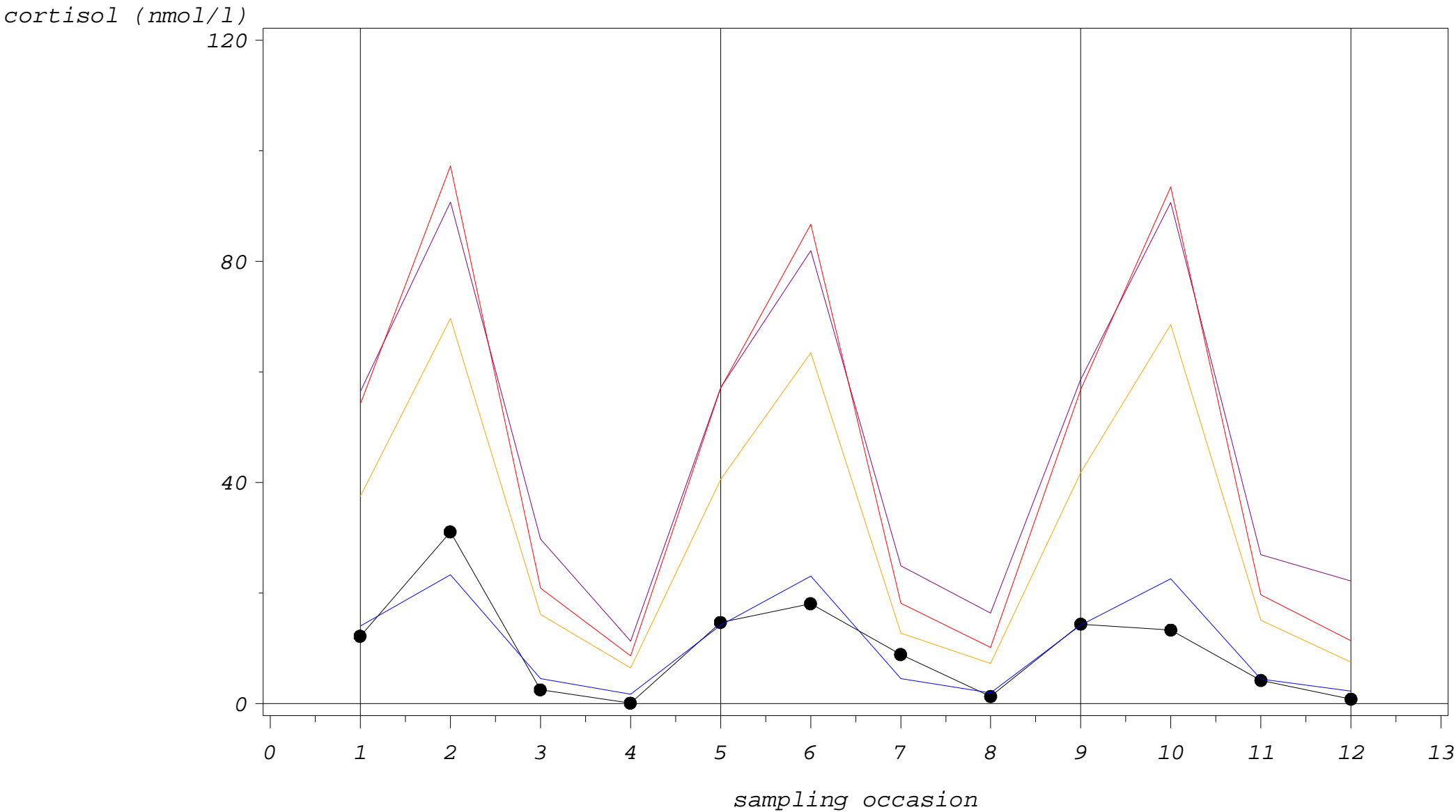
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 \times SD)$
 — $Q3 + (3 \times IQR)$ — $Q2 + (4 \times (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

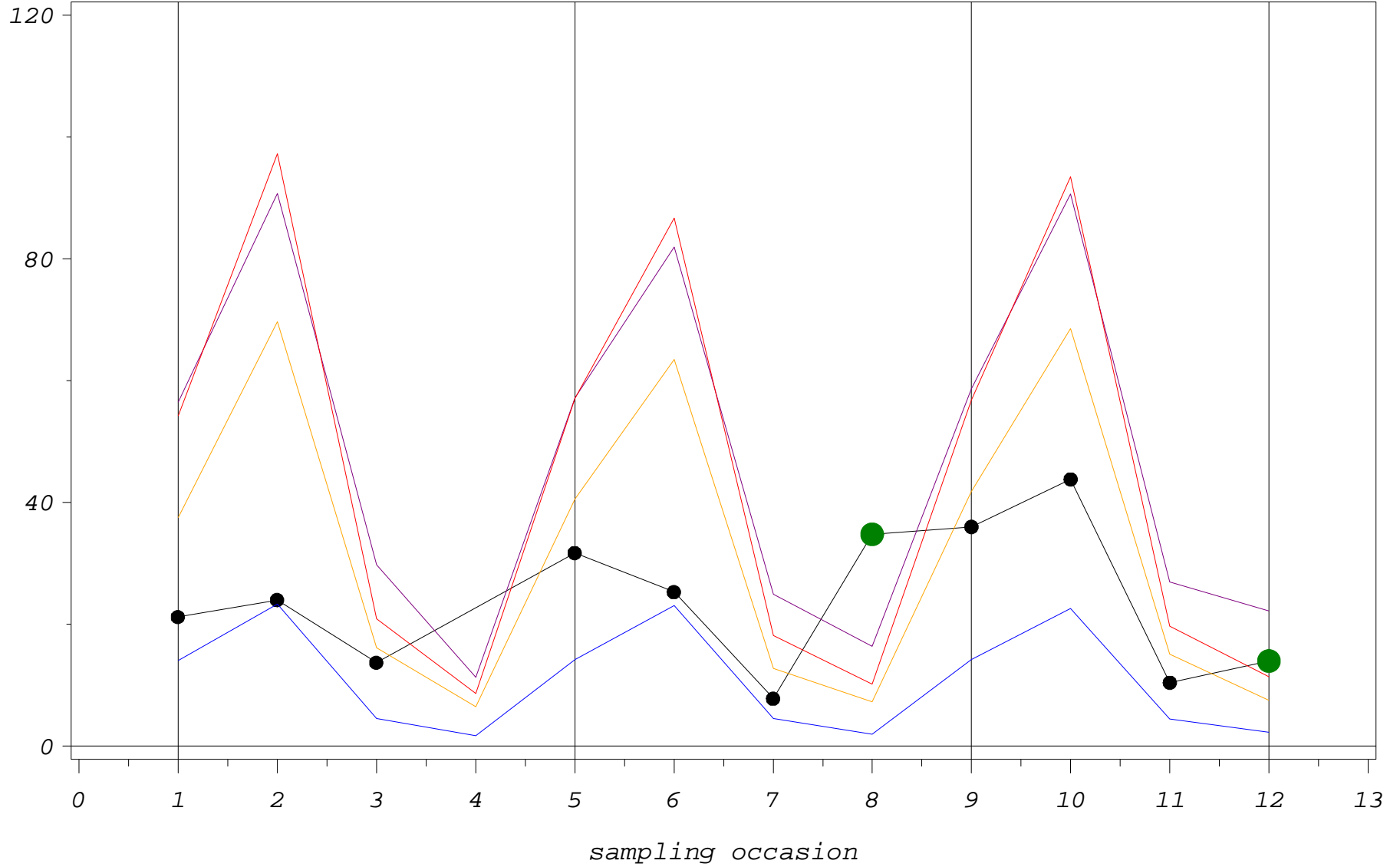
CODE=H31032



Study 2: cortisol single profiles with outlier fences

CODE=H31042

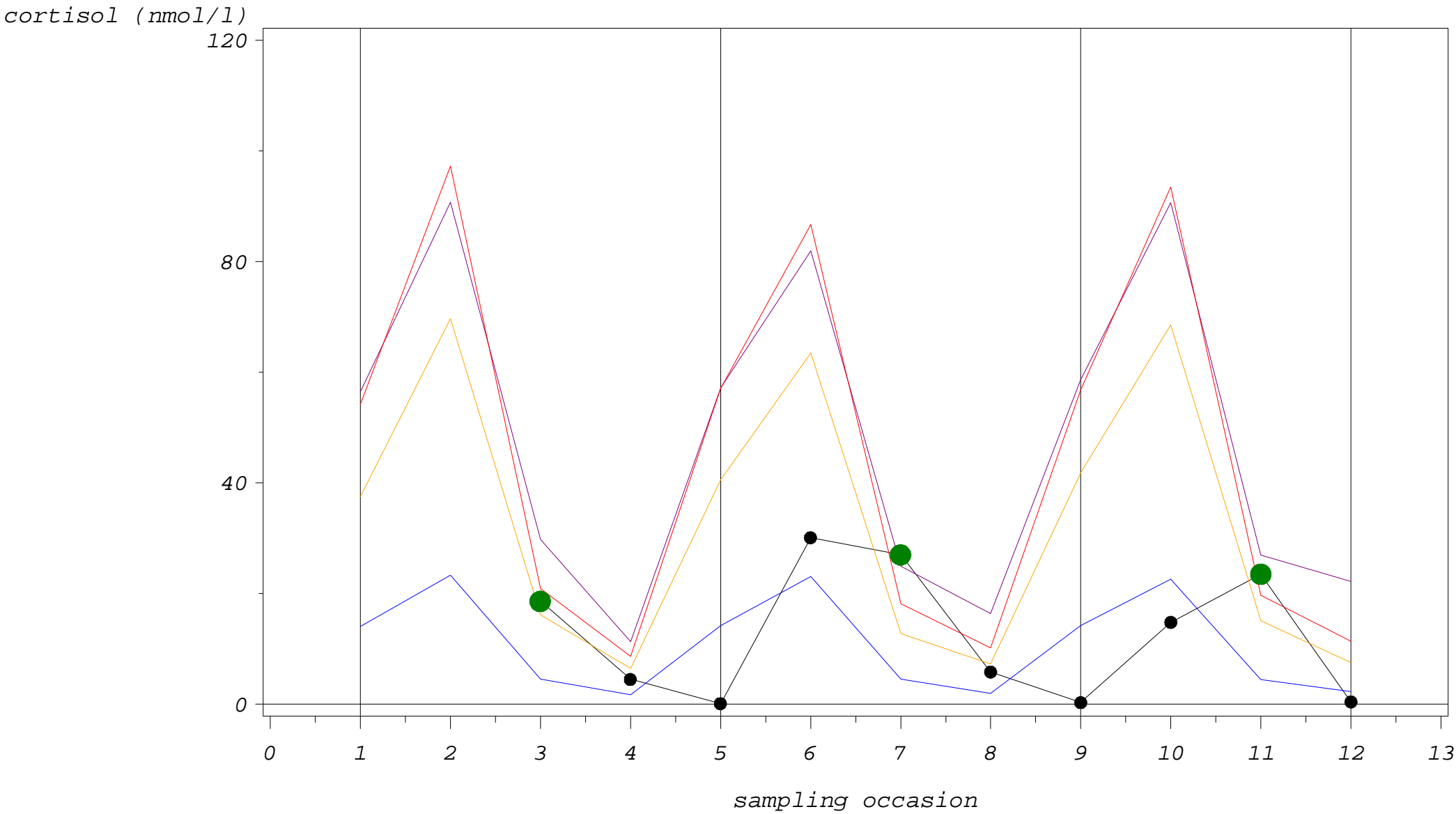
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — $MW + (4 \cdot SD)$
 — $Q3 + (3 \cdot IQR)$ — $Q2 + (4 \cdot (Q3 - Q2))$ ● ● ● cortisol-outlier

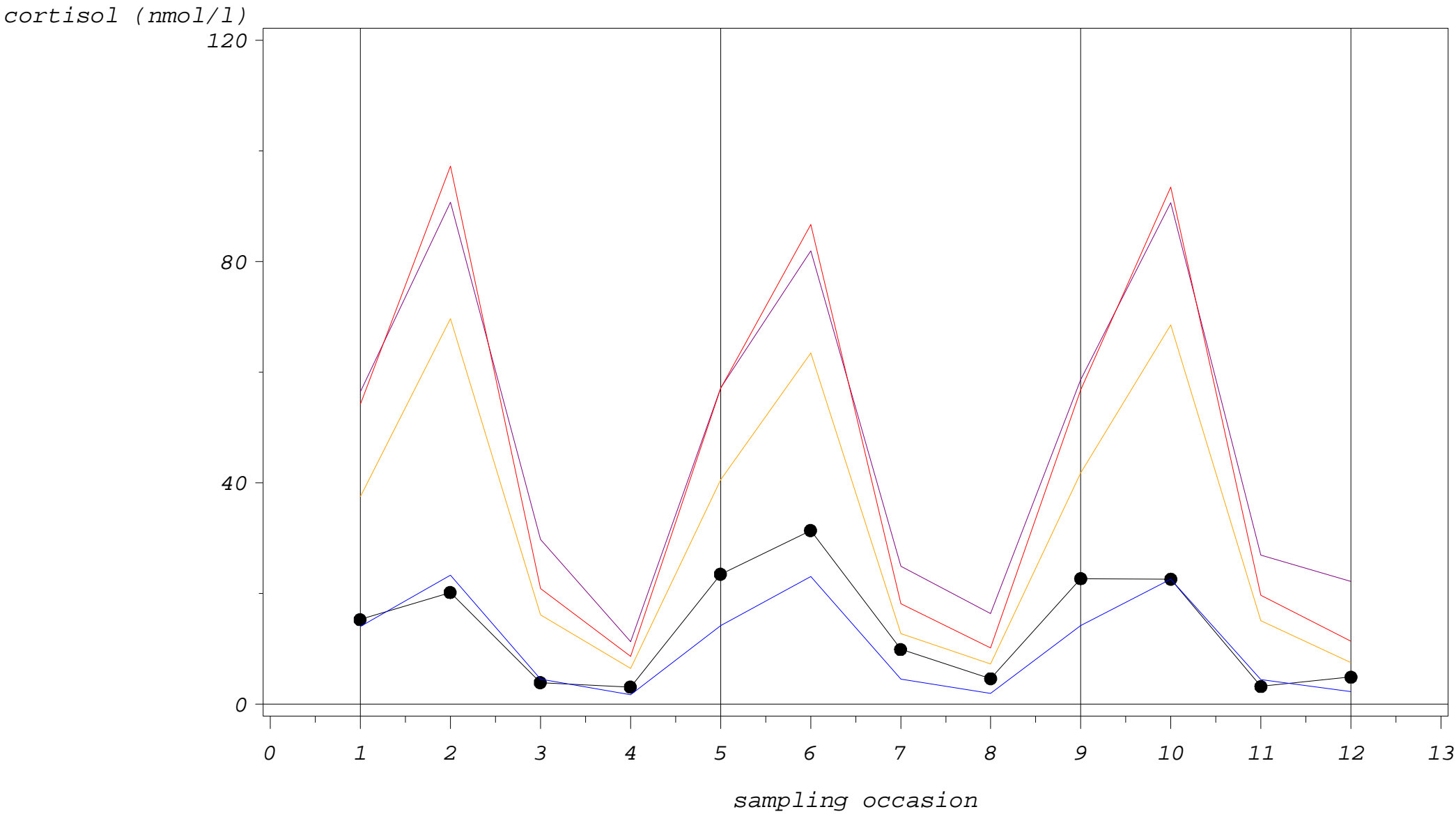
Study 2: cortisol single profiles with outlier fences

CODE=H31052



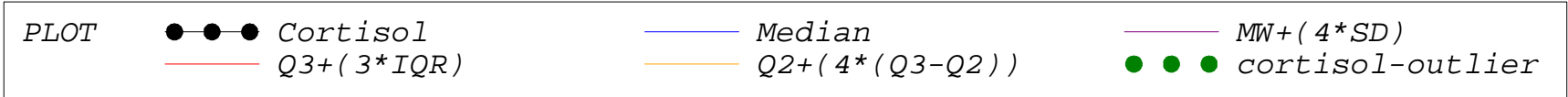
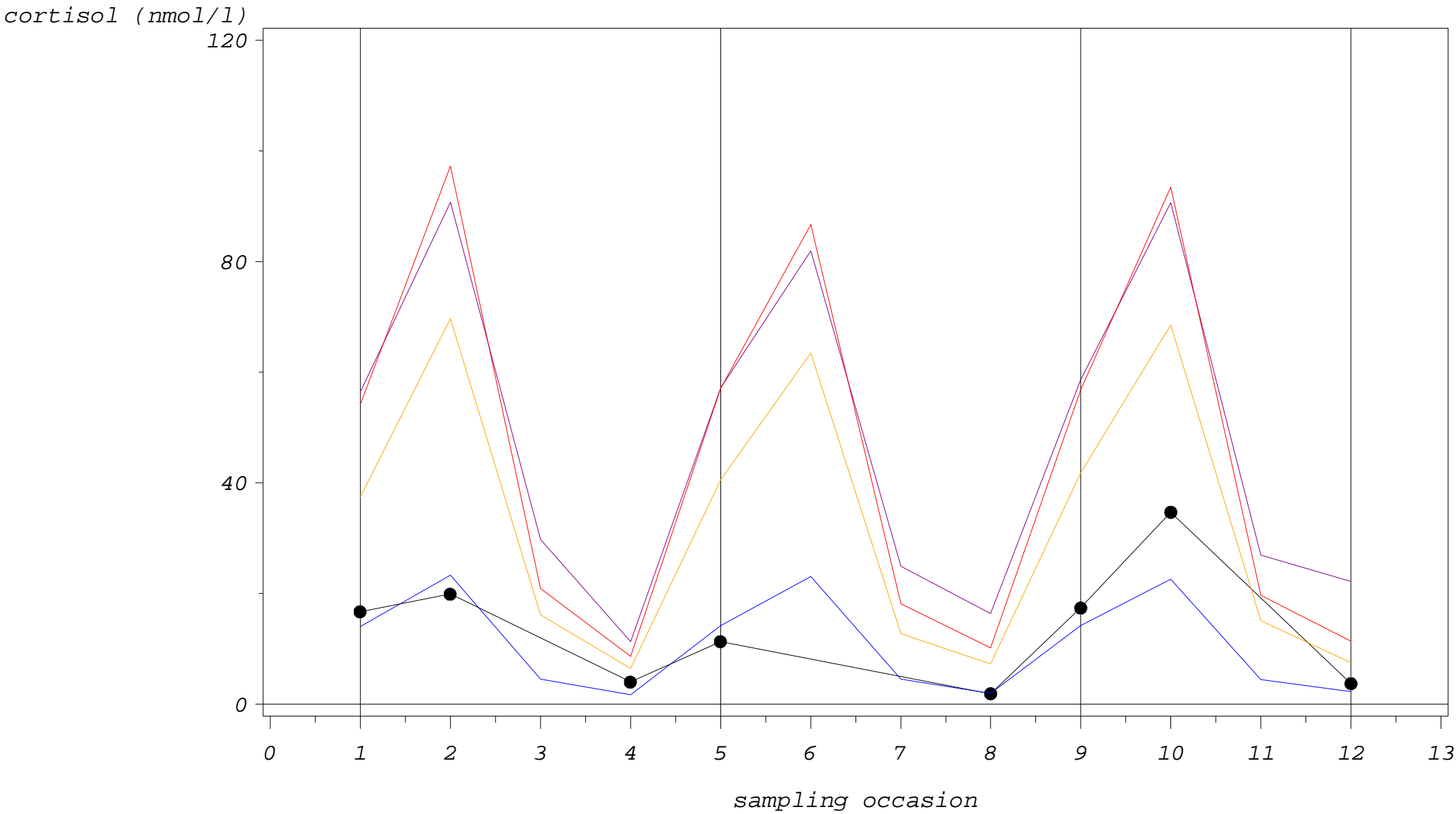
Study 2: cortisol single profiles with outlier fences

CODE=H31062



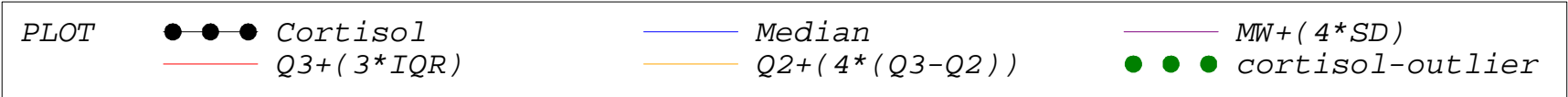
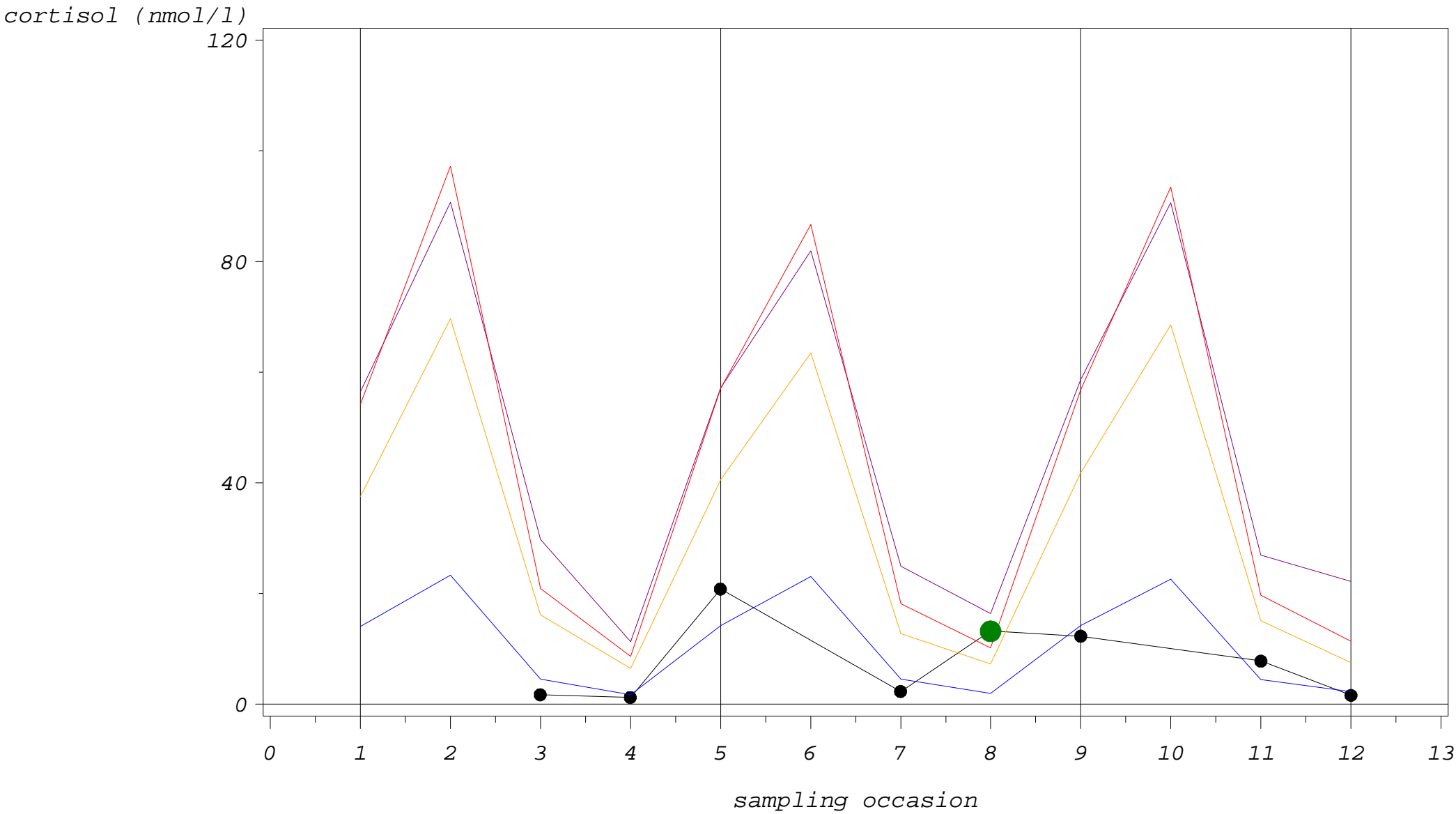
Study 2: cortisol single profiles with outlier fences

CODE=H31072



Study 2: cortisol single profiles with outlier fences

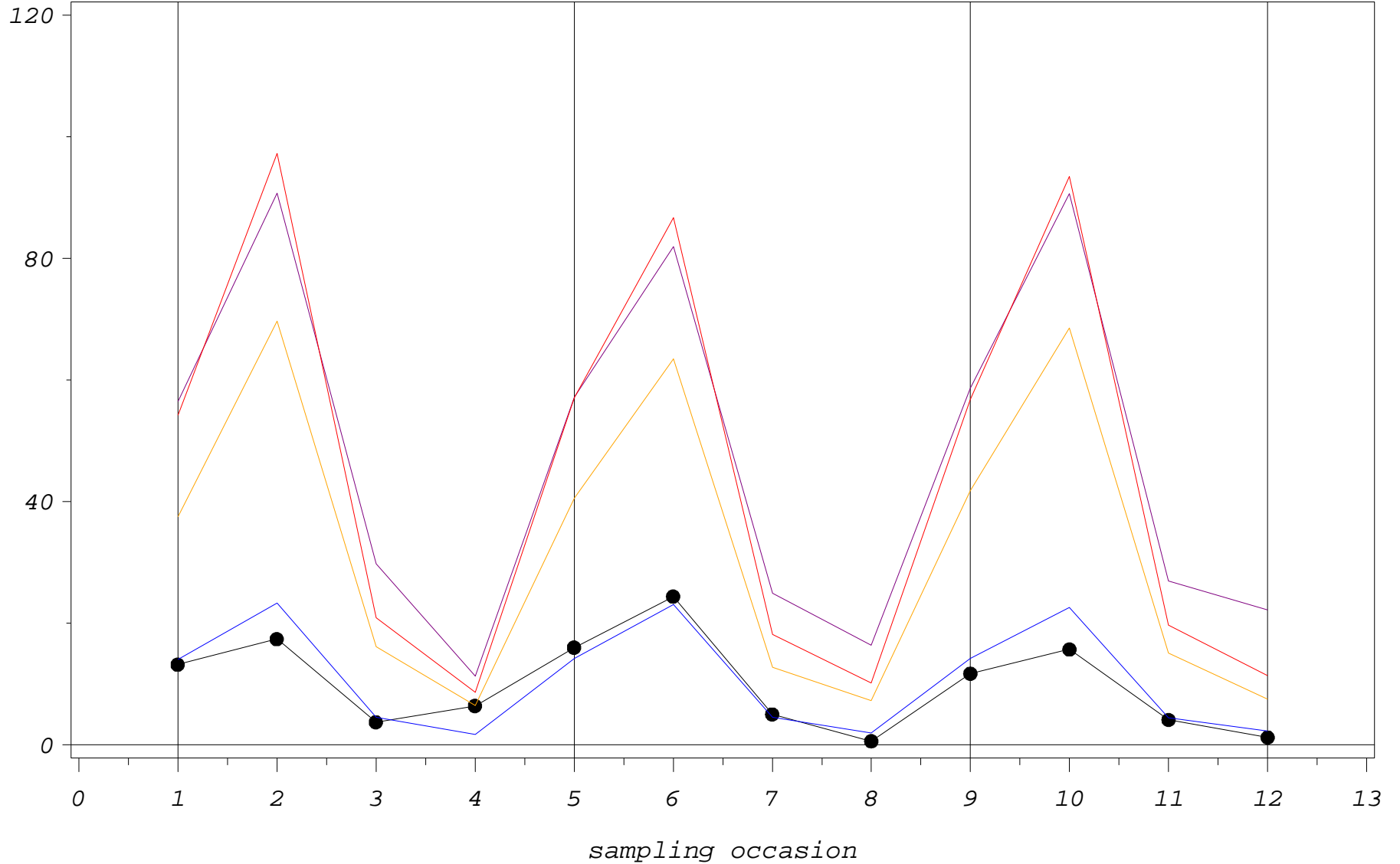
CODE=H31122



Study 2: cortisol single profiles with outlier fences

CODE=H31132

cortisol (nmol/l)

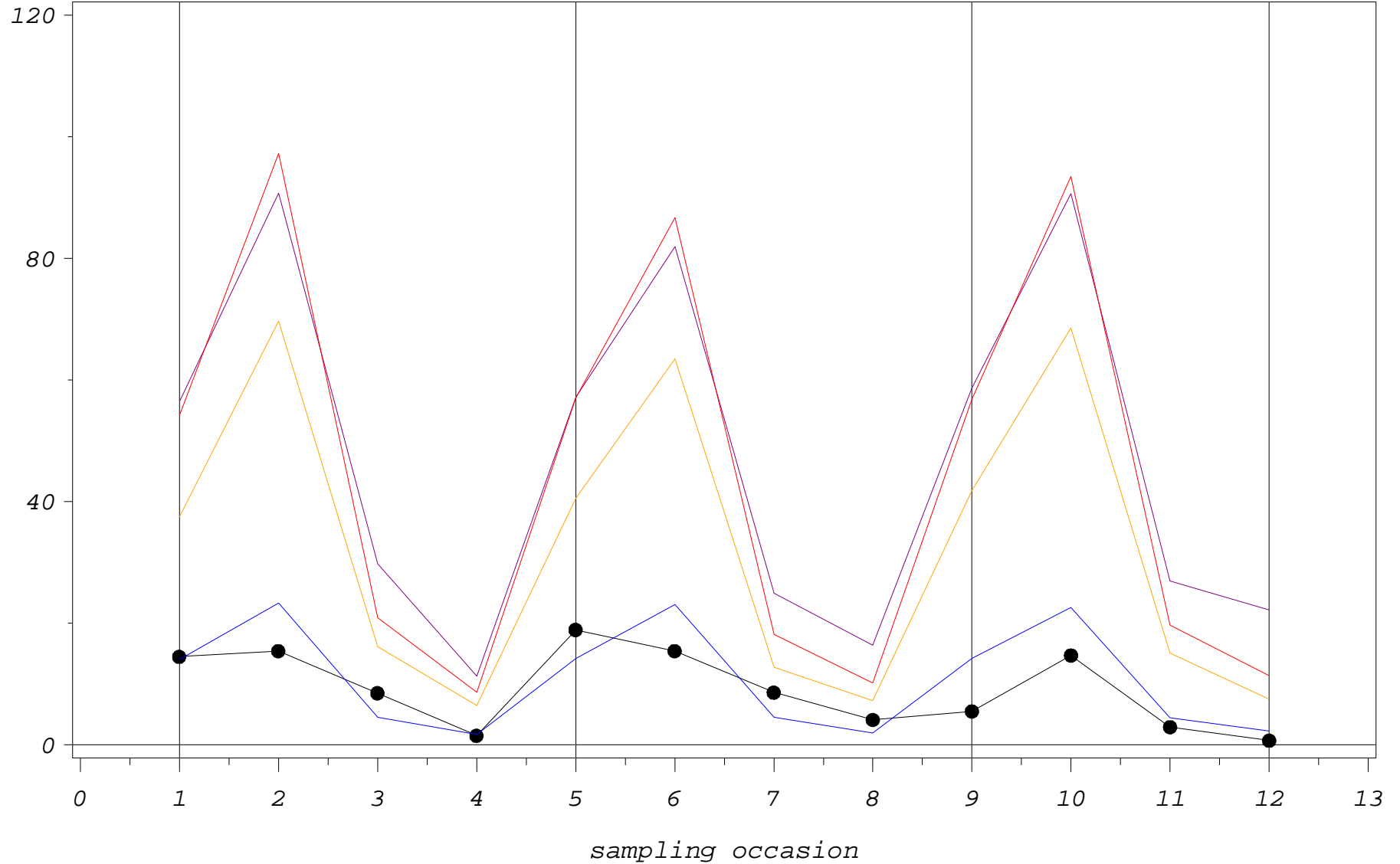


PLOT ●—●—● Cortisol — Median — $MW+(4 \cdot SD)$
 — $Q3+(3 \cdot IQR)$ — $Q2+(4 \cdot (Q3-Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H32032

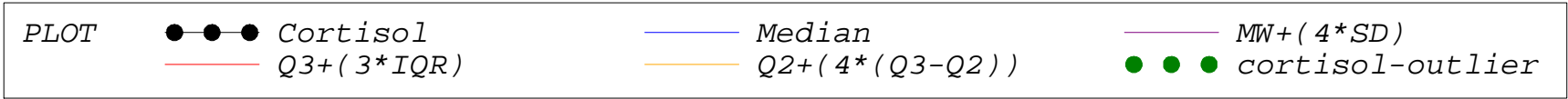
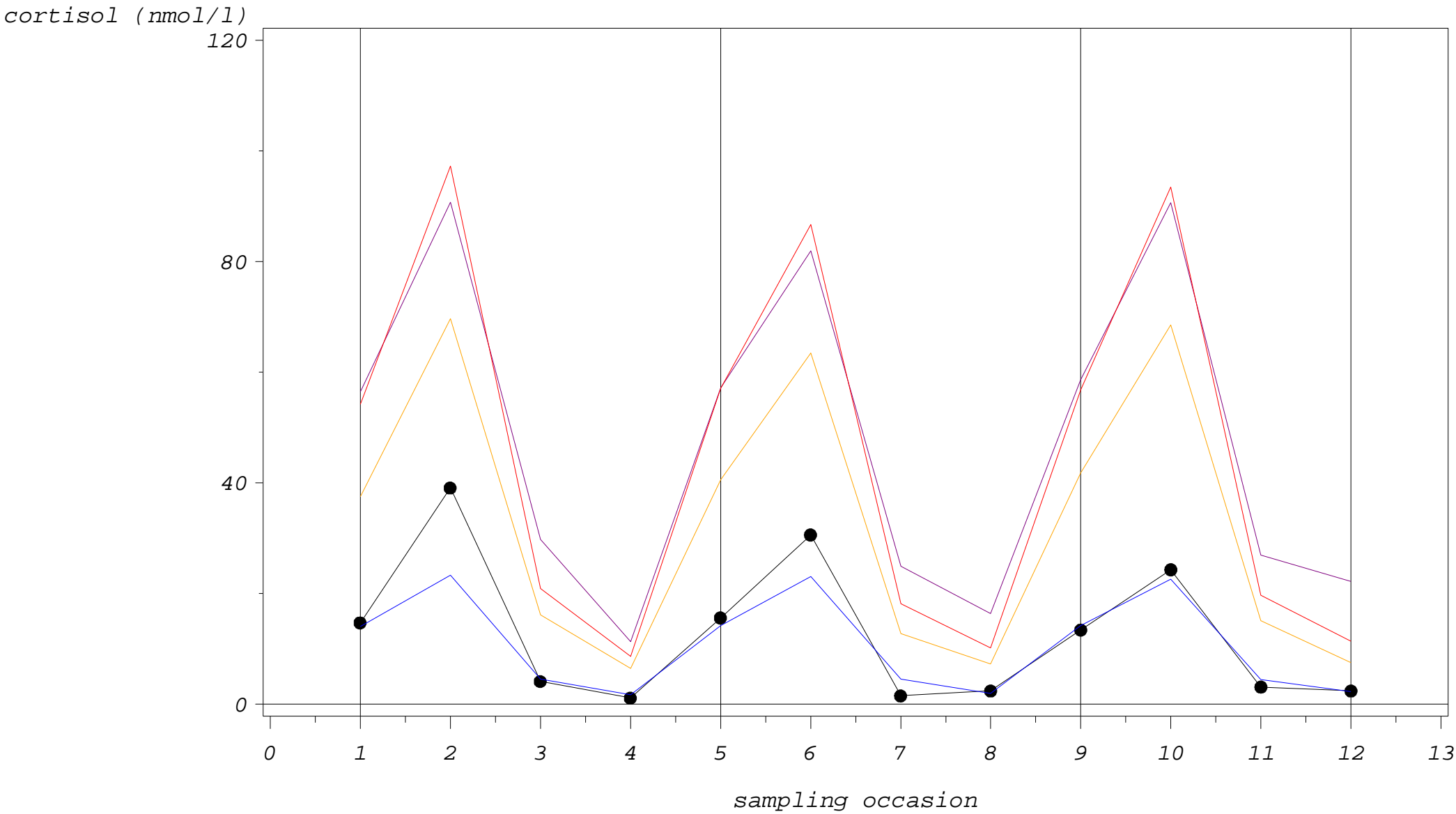
cortisol (nmol/l)



PLOT ●—●—● Cortisol — Median — MW+(4*SD)
 — Q3+(3*IQR) — Q2+(4*(Q3-Q2)) ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

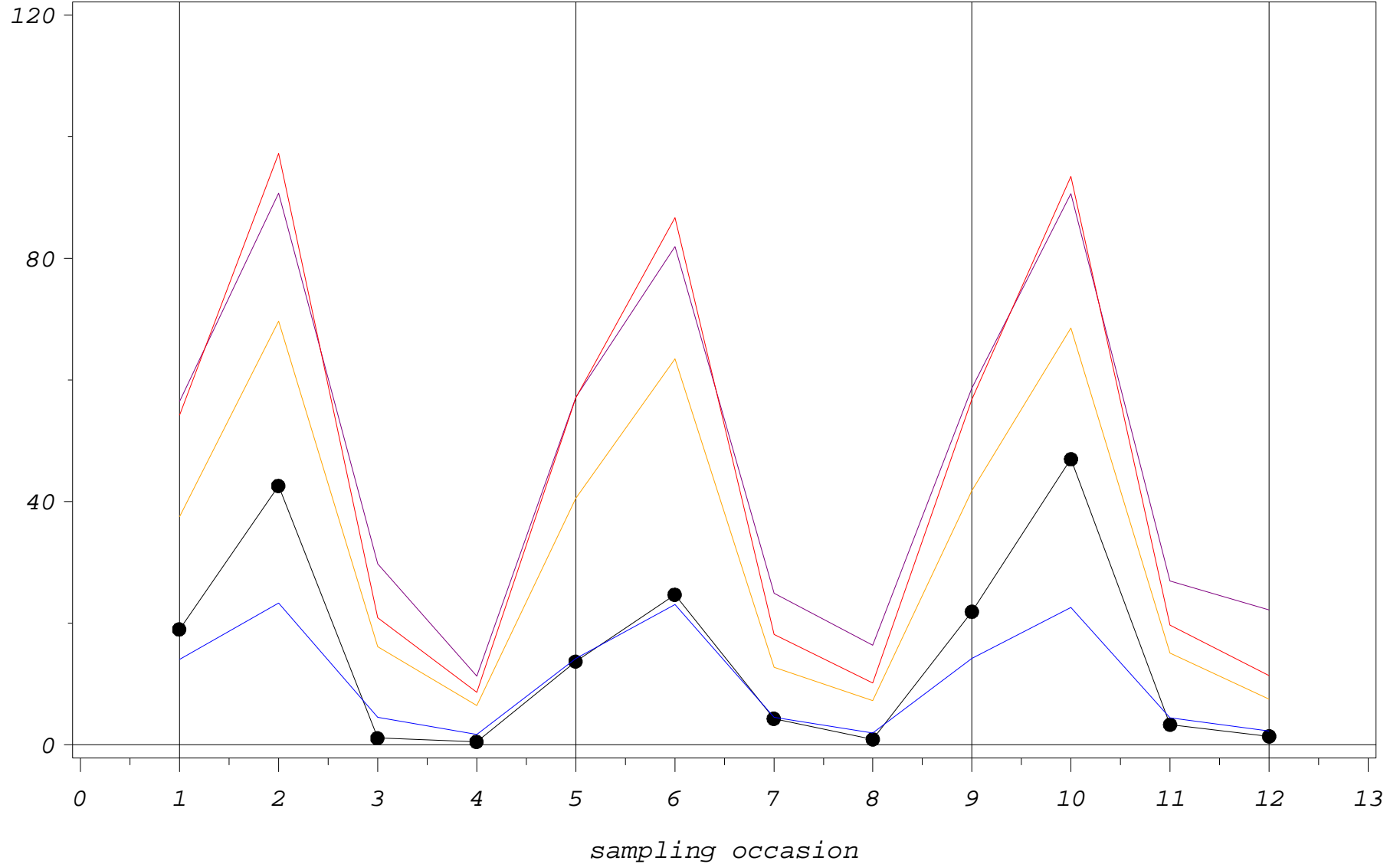
CODE=H32072



Study 2: cortisol single profiles with outlier fences

CODE=H32082

cortisol (nmol/l)

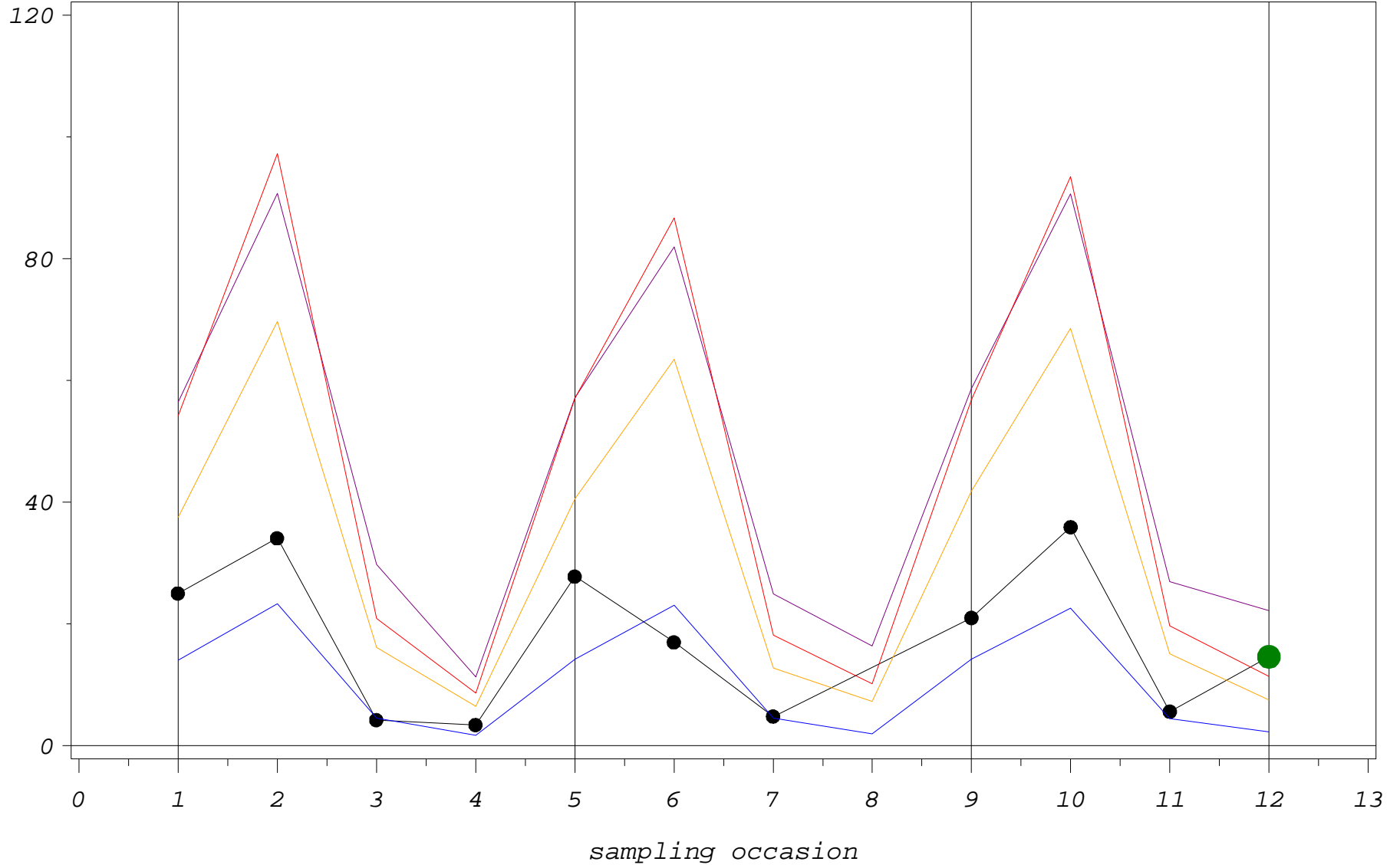


PLOT ●—●—● Cortisol — Median — $MW + (4 \cdot SD)$
 — $Q3 + (3 \cdot IQR)$ — $Q2 + (4 \cdot (Q3 - Q2))$ ● ● ● cortisol-outlier

Study 2: cortisol single profiles with outlier fences

CODE=H32092

cortisol (nmol/l)



PLOT

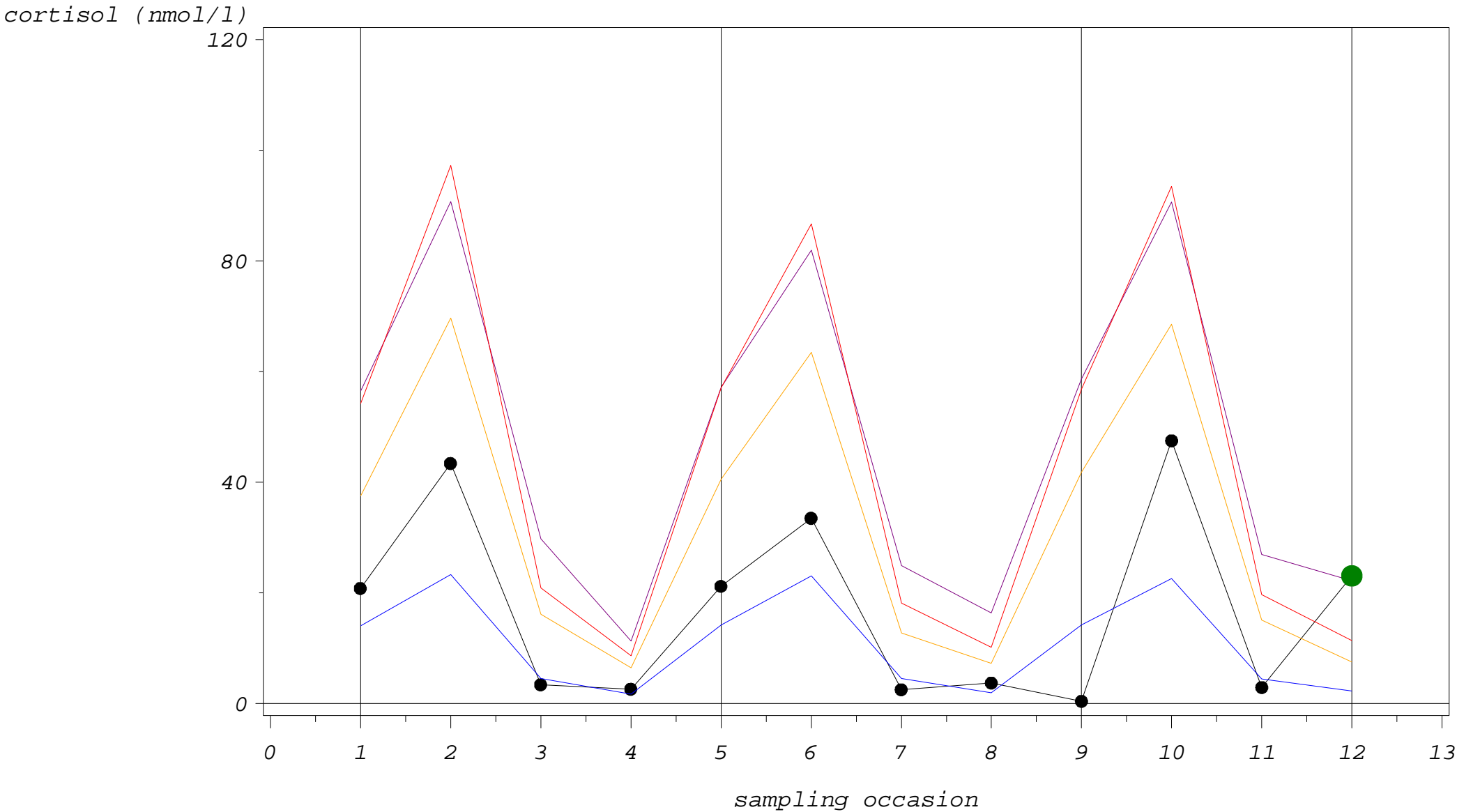
●—●—● Cortisol
— Q3+(3*IQR)

— Median
— Q2+(4*(Q3-Q2))

— MW+(4*SD)
● ● ● cortisol-outlier

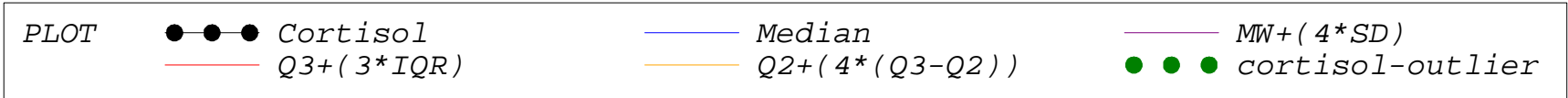
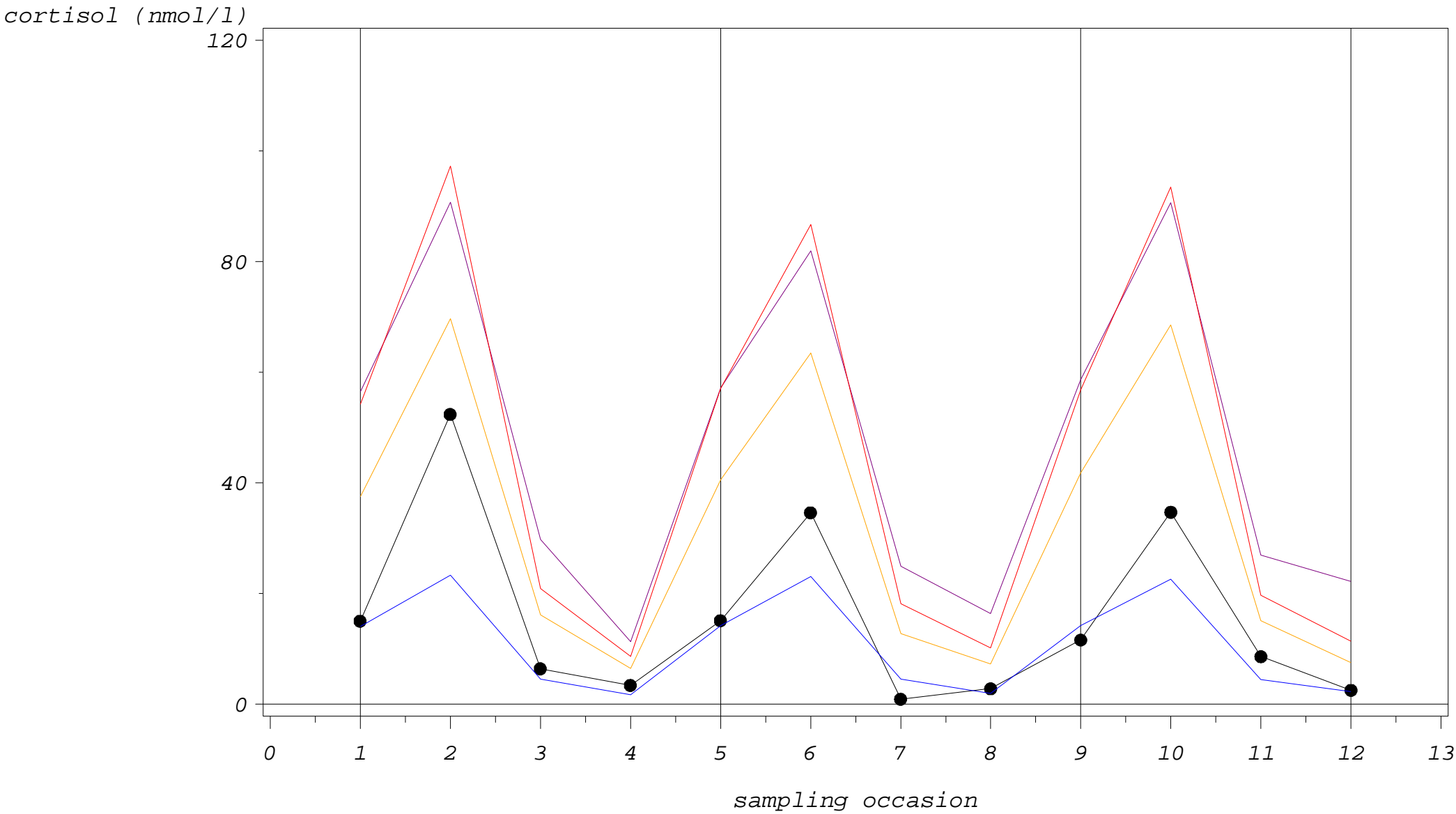
Study 2: cortisol single profiles with outlier fences

CODE=H32102



Study 2: cortisol single profiles with outlier fences

CODE=H32112

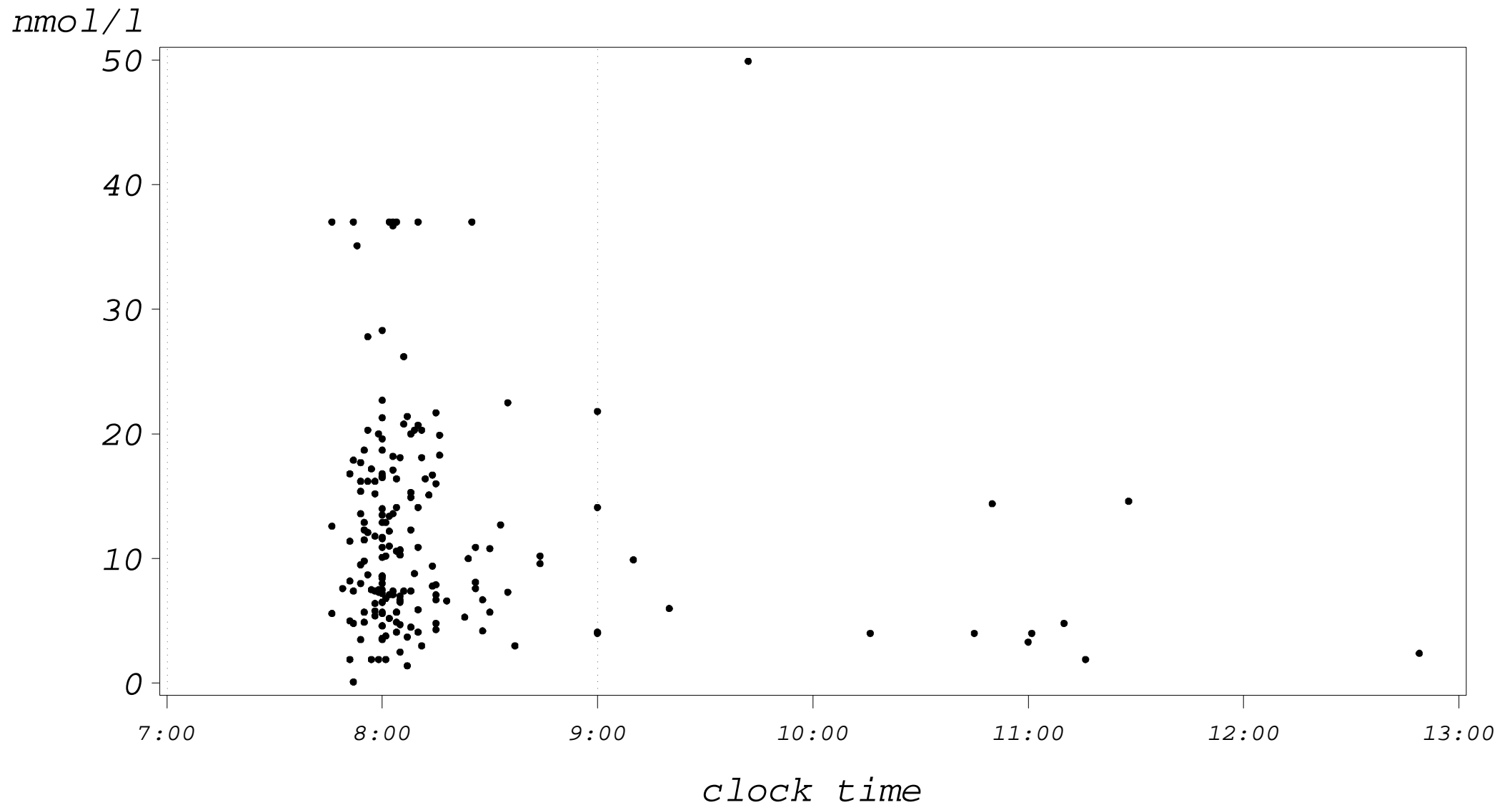


Appendix 3.1

Cortisol Levels and Sampling Time

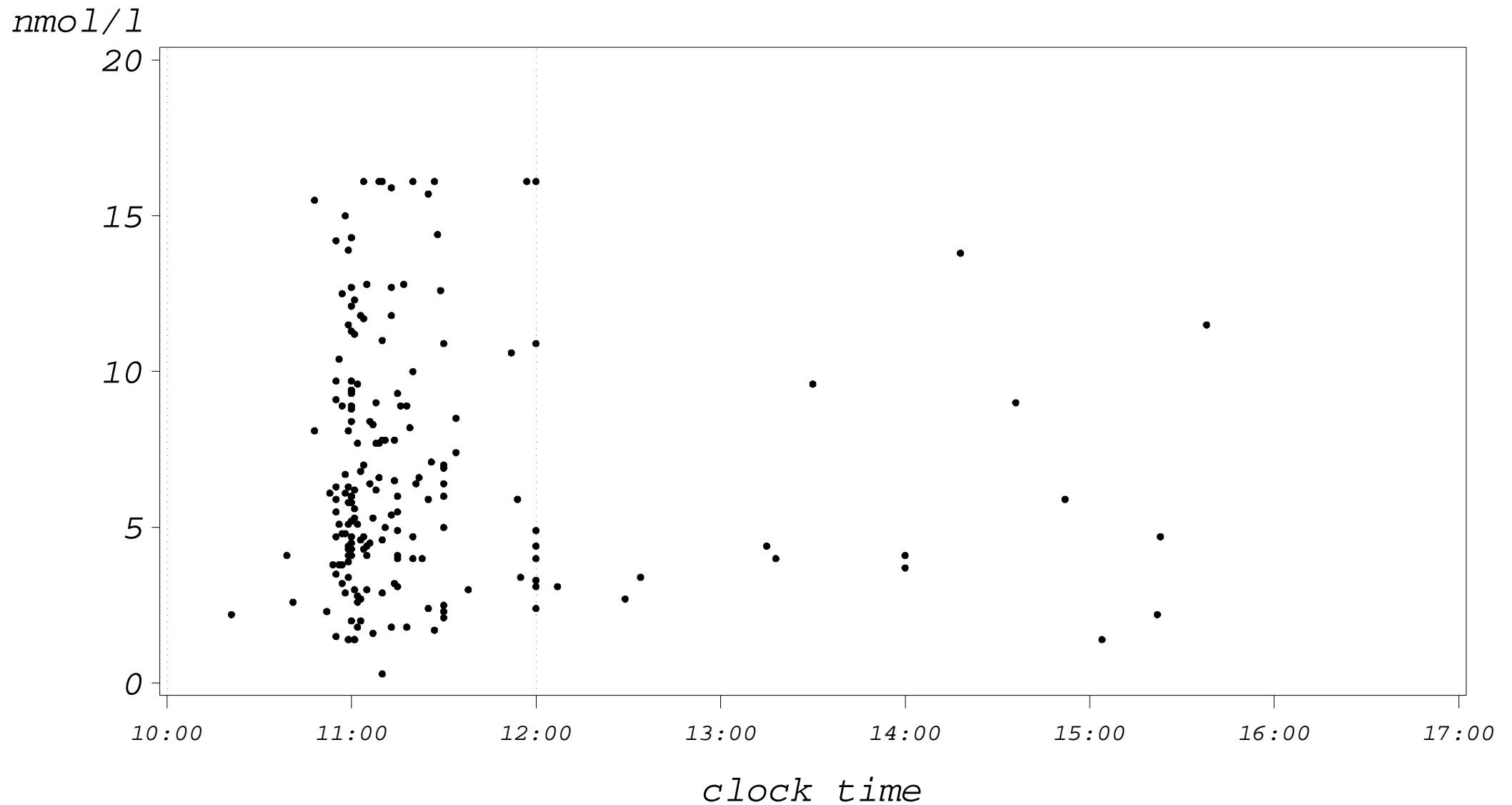
Study 1: cortisol levels and sampling time (clock time)

cortisol levels at t(08:00)



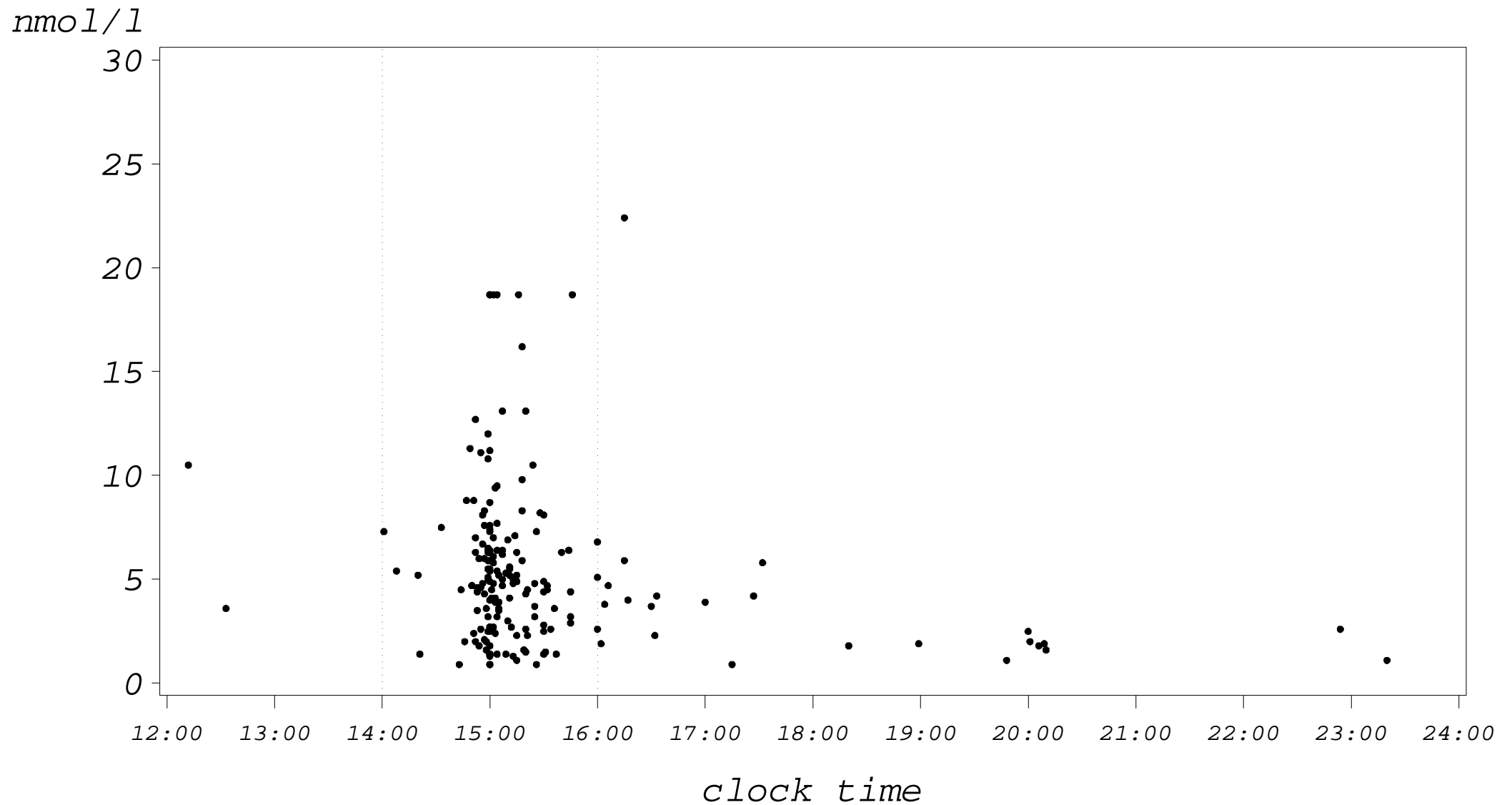
Study 1: cortisol levels and sampling time (clock time)

cortisol levels at t(11:00)



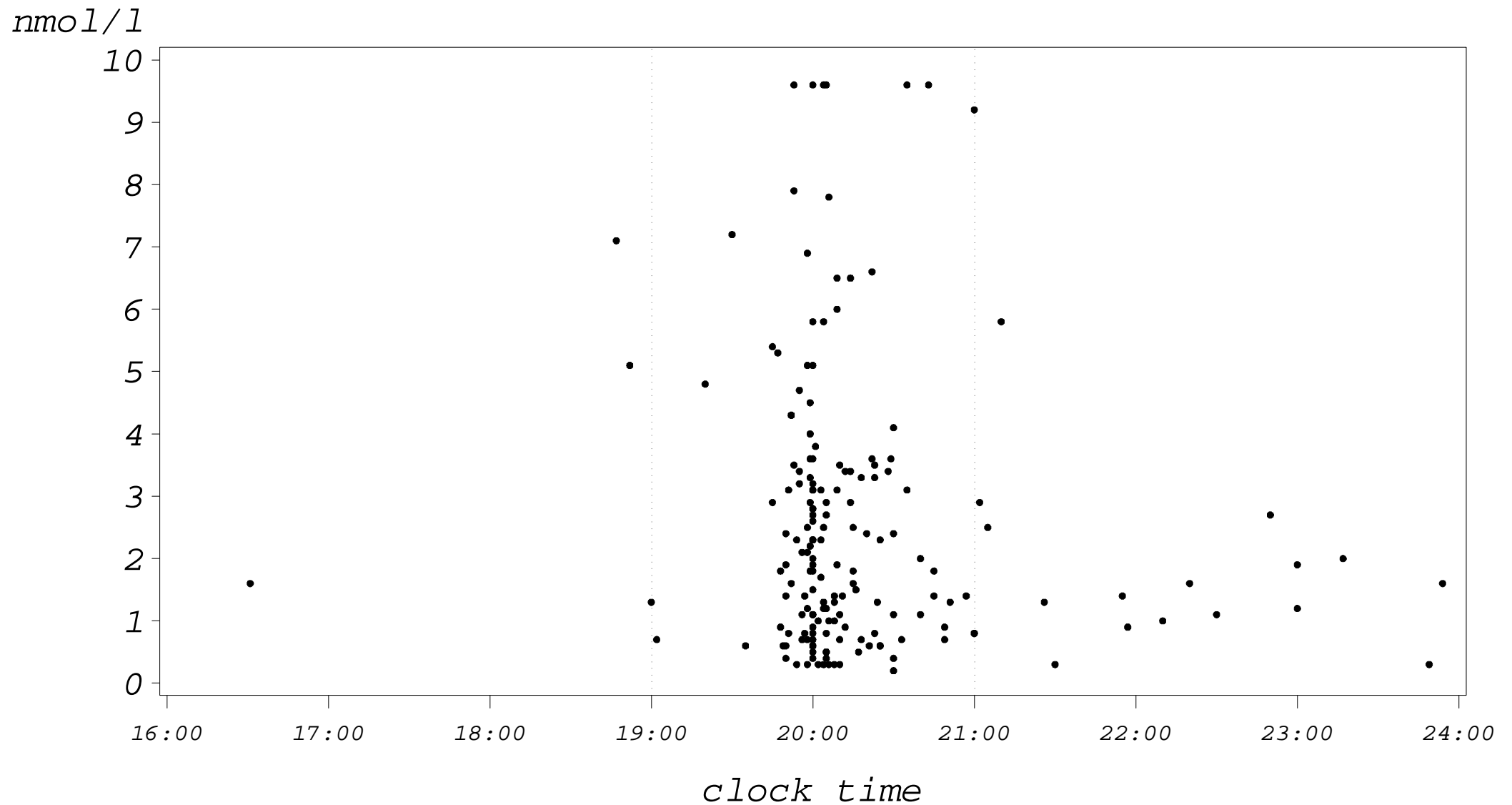
Study 1: cortisol levels and sampling time (clock time)

cortisol levels at t(15:00)

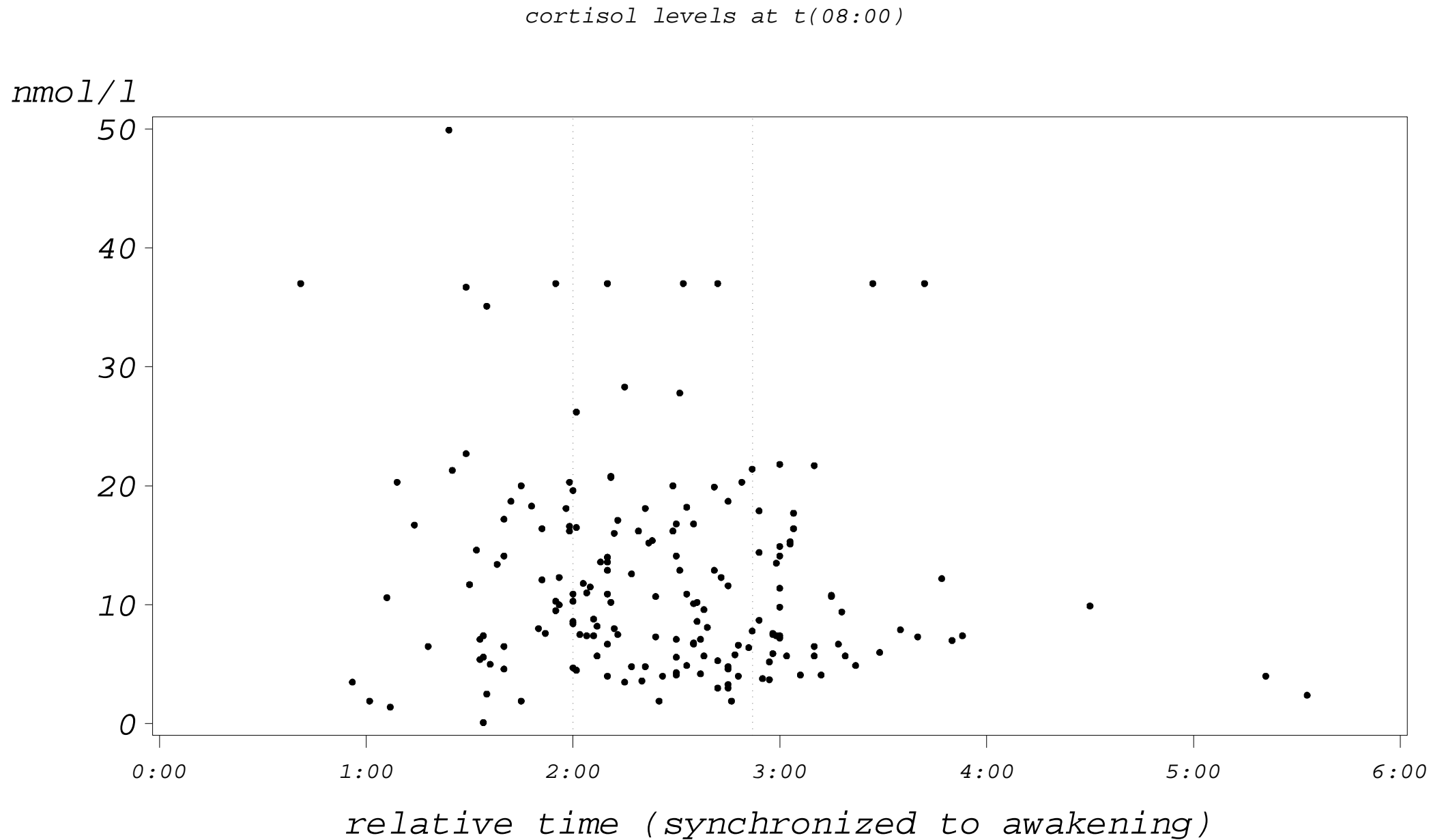


Study 1: cortisol levels and sampling time (clock time)

cortisol levels at t(20:00)

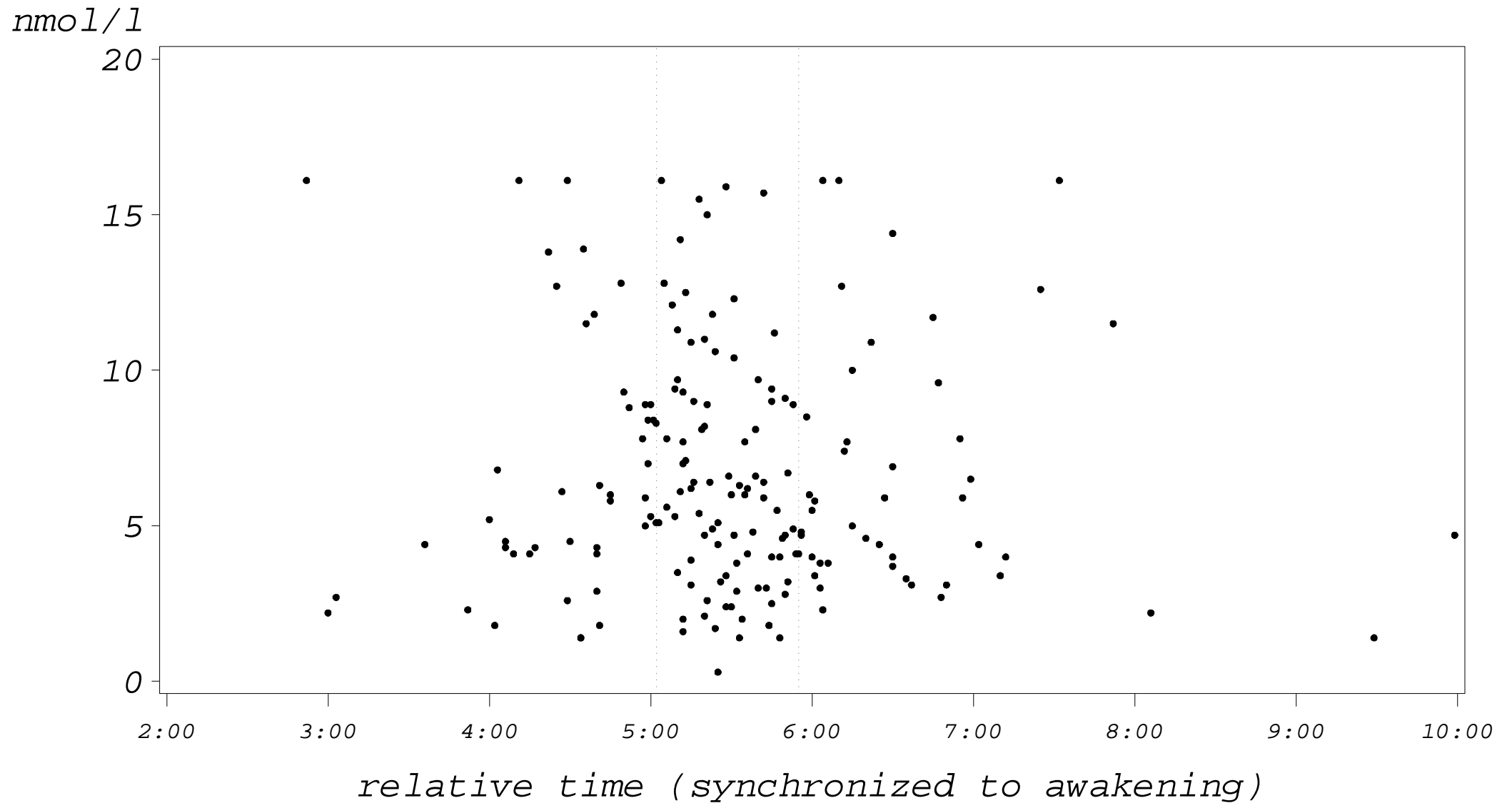


Study 1: cortisol levels and sampling time (relative time)



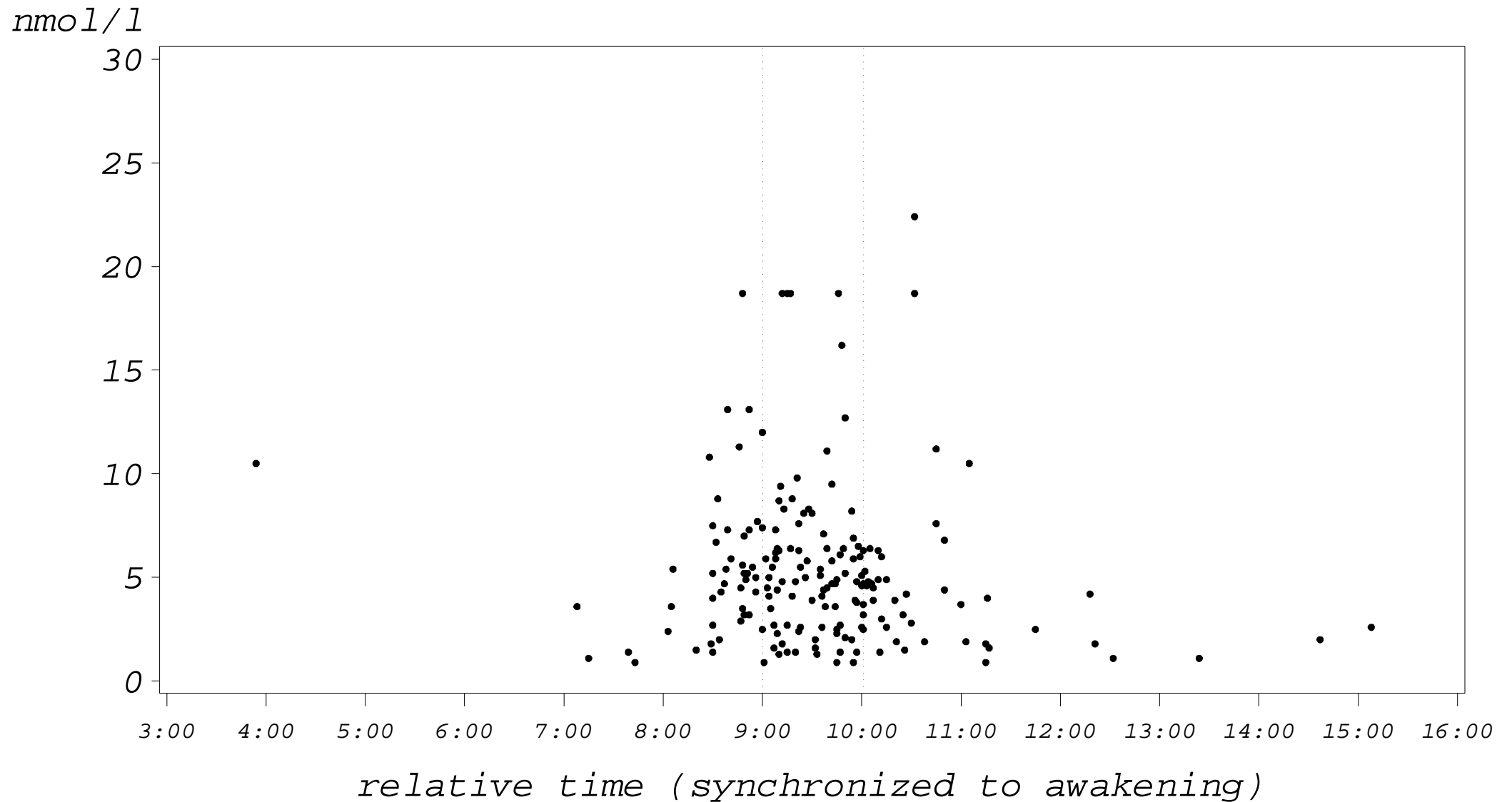
Study 1: cortisol levels and sampling time (relative time)

cortisol levels at t(11:00)



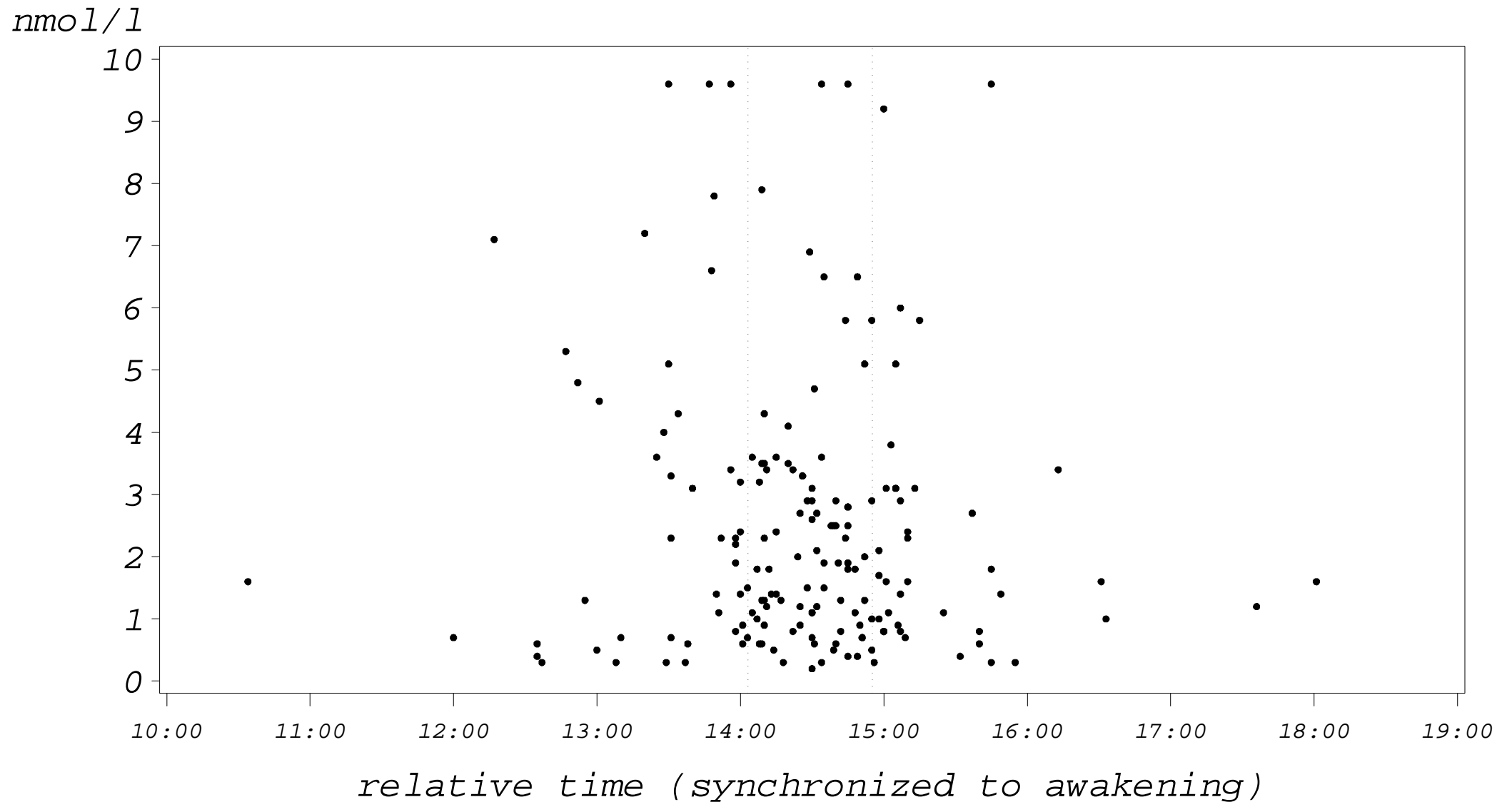
Study 1: cortisol levels and sampling time (relative time)

cortisol levels at t(15:00)



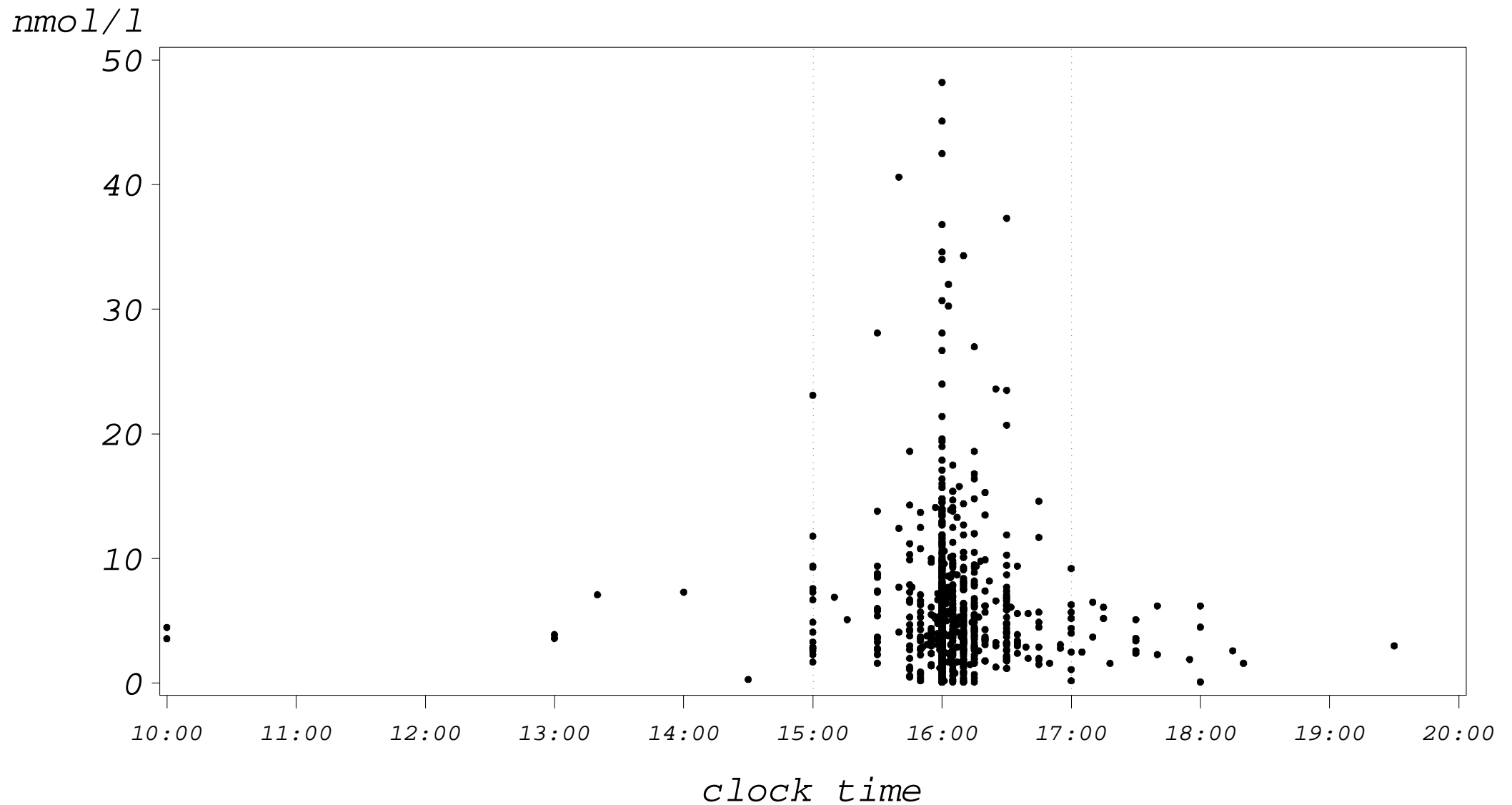
Study 1: cortisol levels and sampling time (relative time)

cortisol levels at t(20:00)



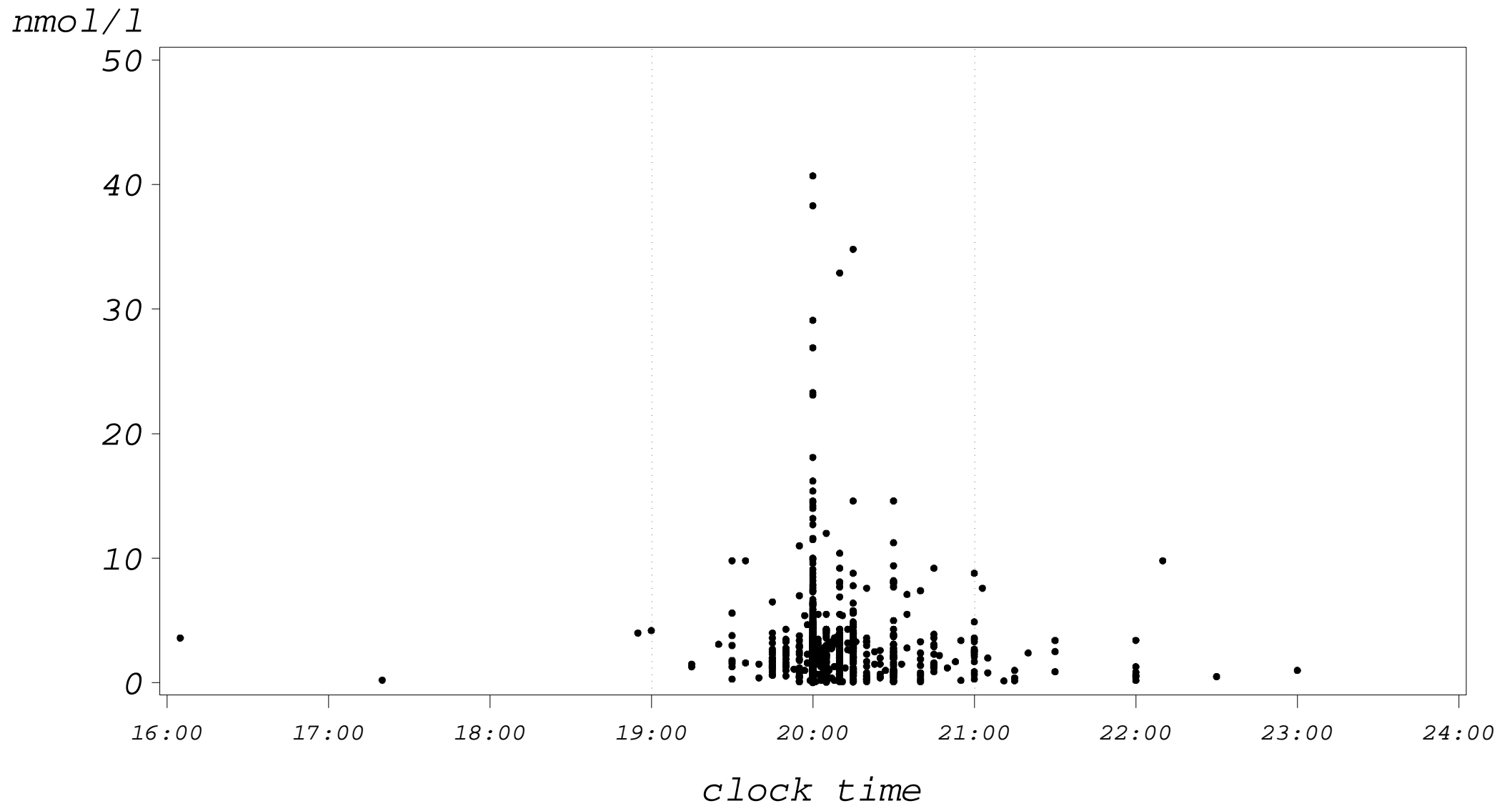
Study 2: cortisol levels and sampling time (clock time)

cortisol levels at t(16:00)



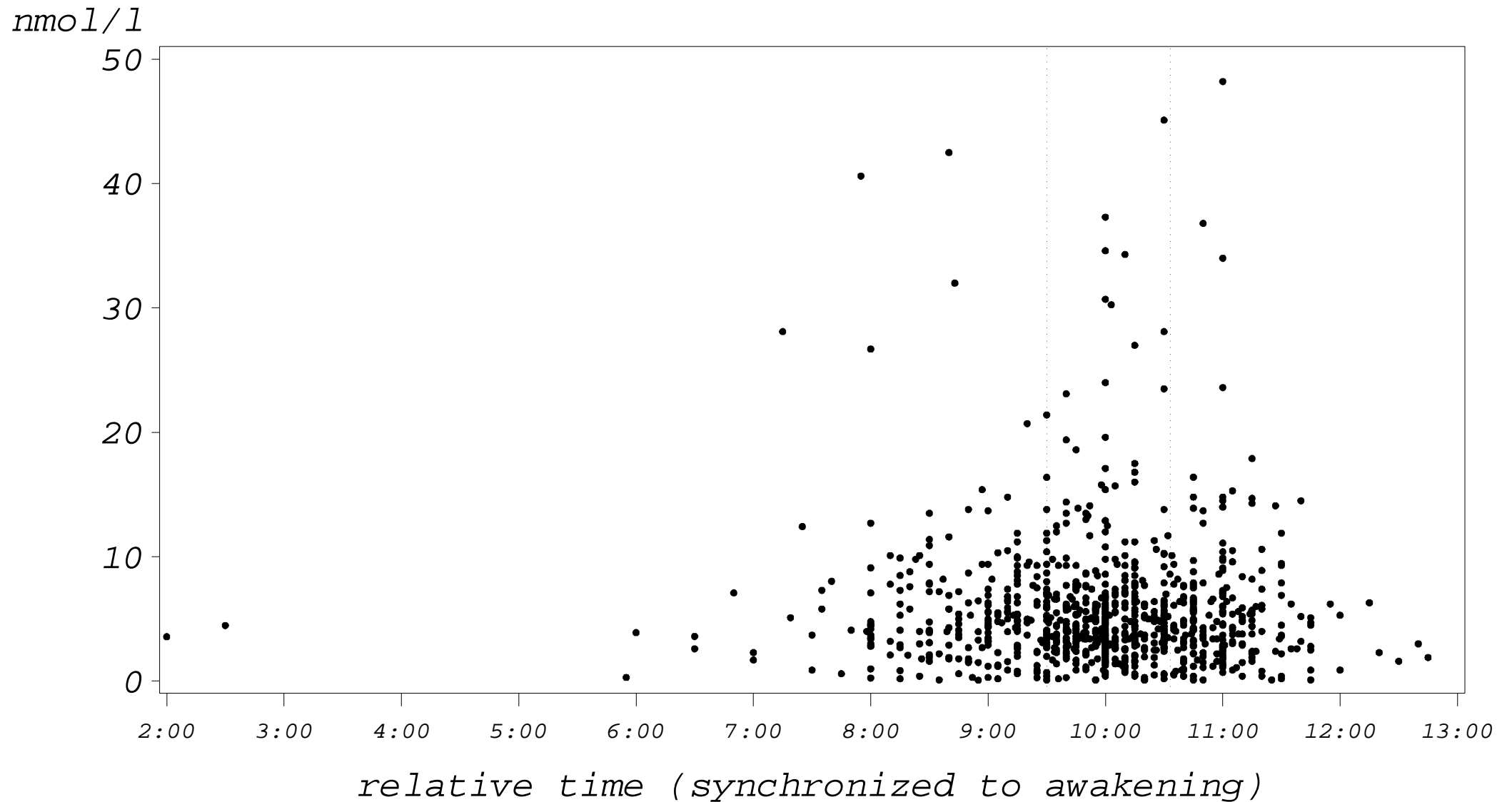
Study 2: cortisol levels and sampling time (clock time)

cortisol levels at t(20:00)



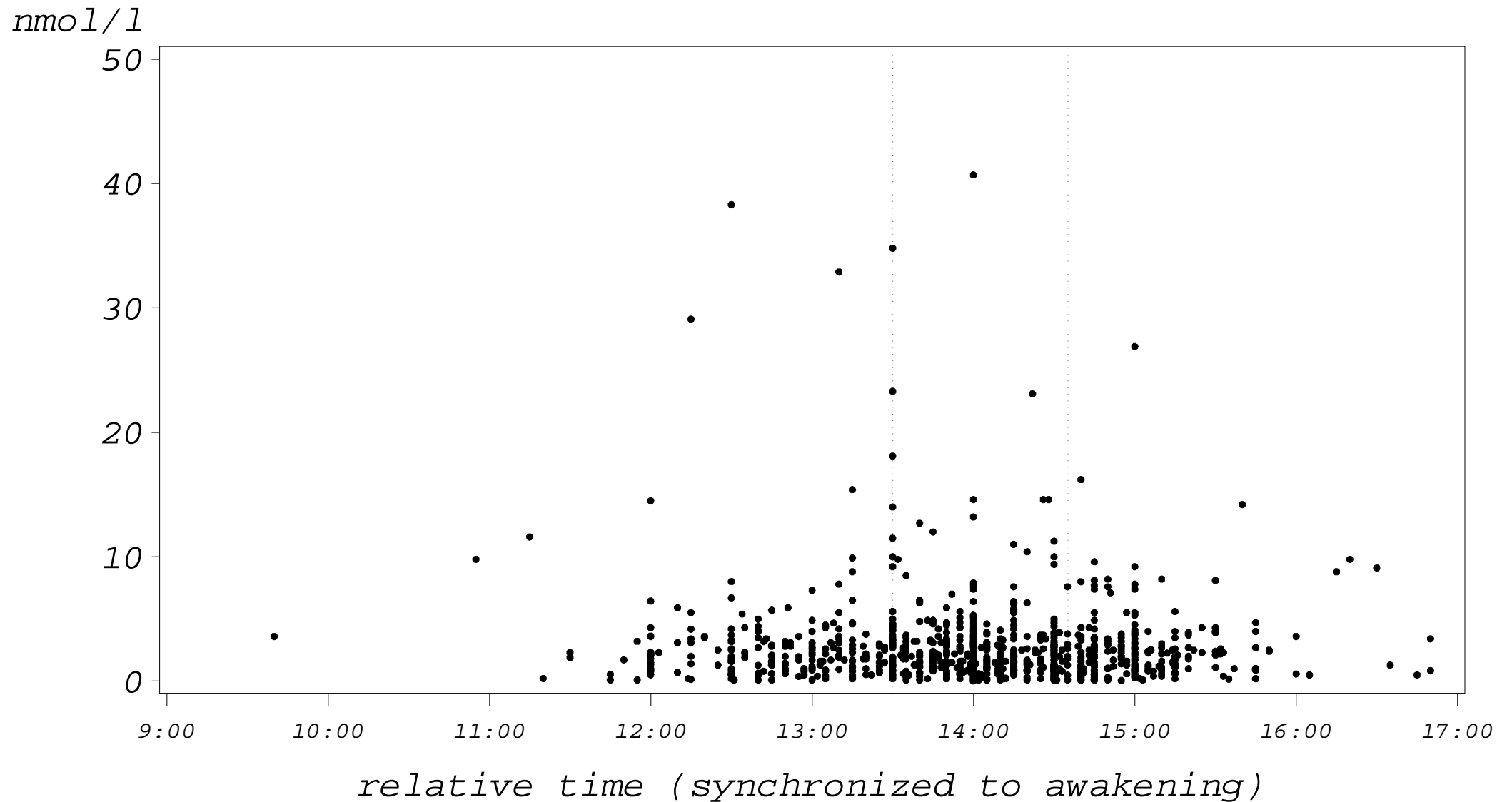
Study 2: cortisol levels and sampling time (relative time)

cortisol levels at t(15:00)



Study 2: cortisol levels and sampling time (relative time)

cortisol levels at t(20:00)

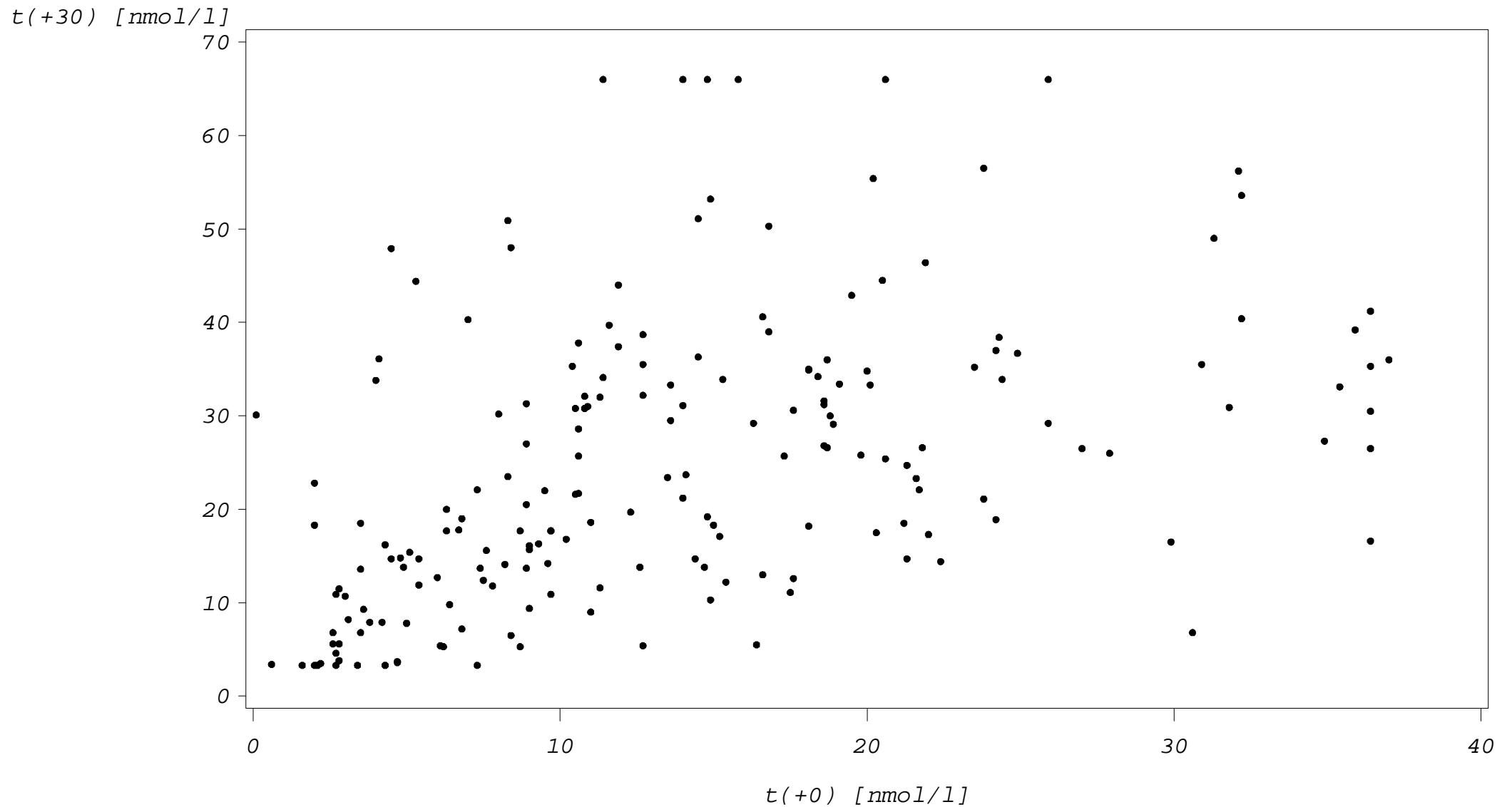


Appendix 3.2

Effect of Awakening Cortisol Levels

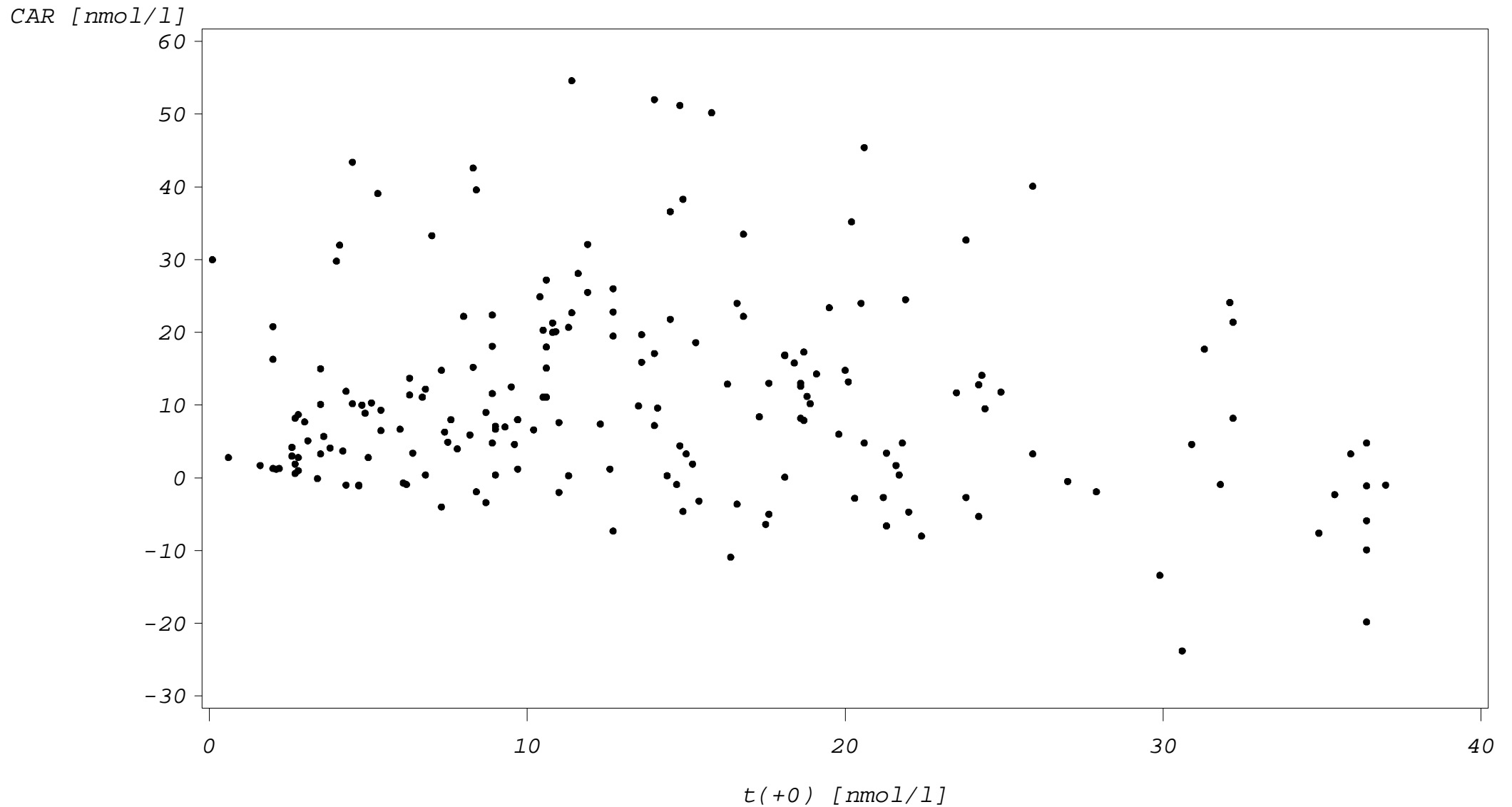
Study 1: effect of awakening cortisol levels

*cortisol levels at $t(+0)$ * cortisol levels at $t(+30)$*



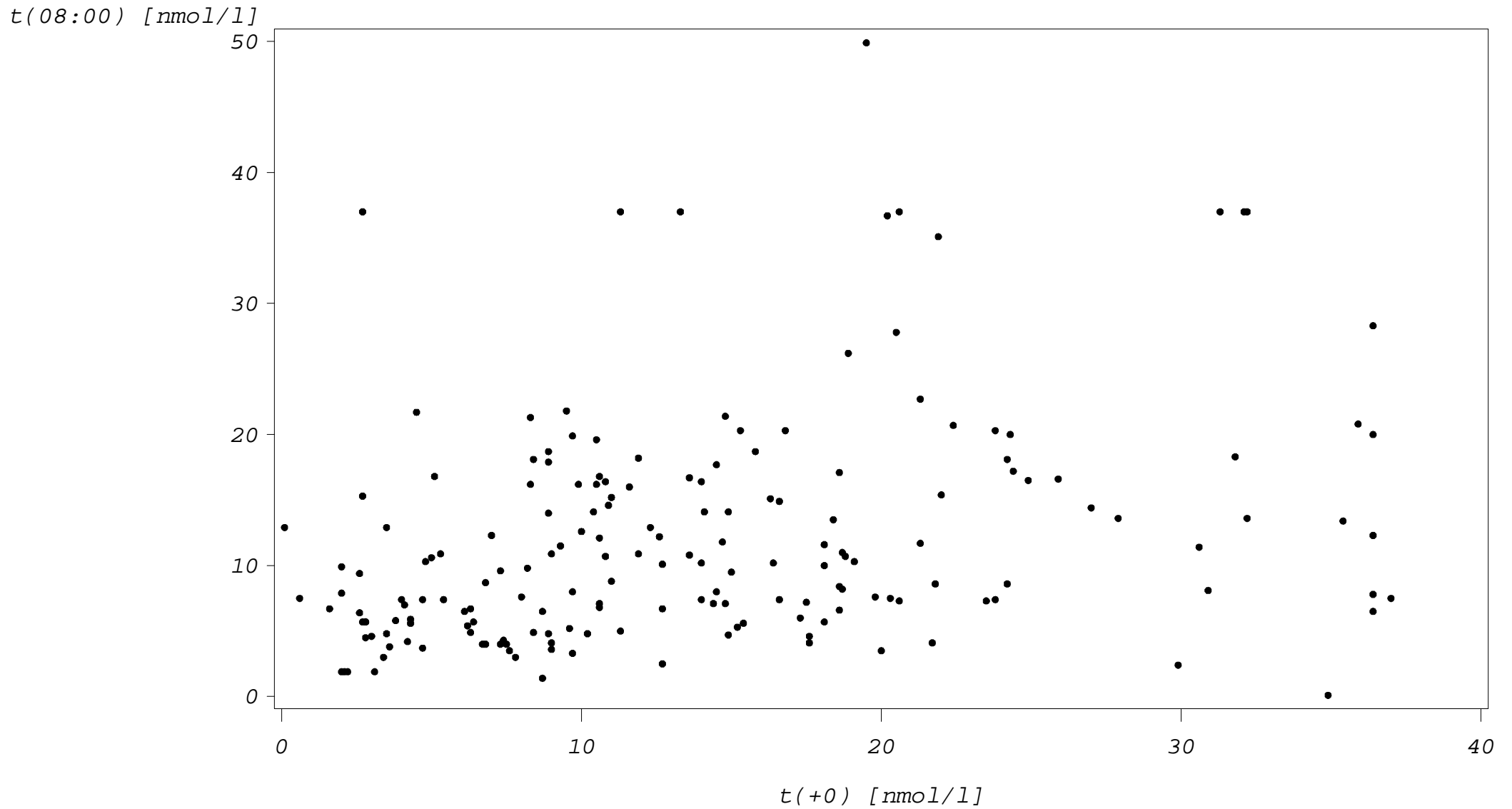
Study 1: effect of awakening cortisol levels

*cortisol levels at $t(+0)$ * cortisol awakening rise*



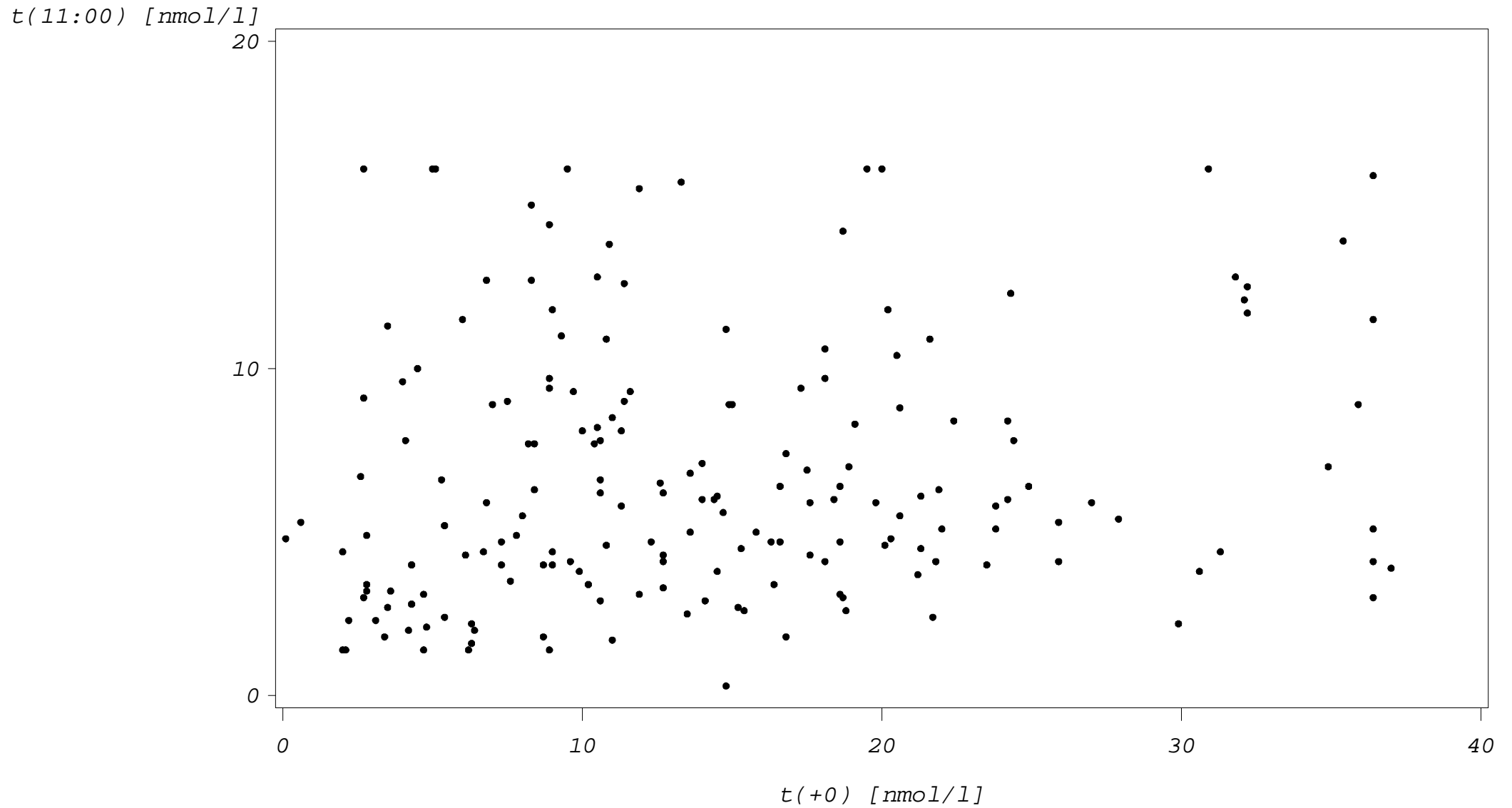
Study 1: effect of awakening cortisol levels

*cortisol levels at $t(+0)$ * cortisol levels at $t(08:00)$*



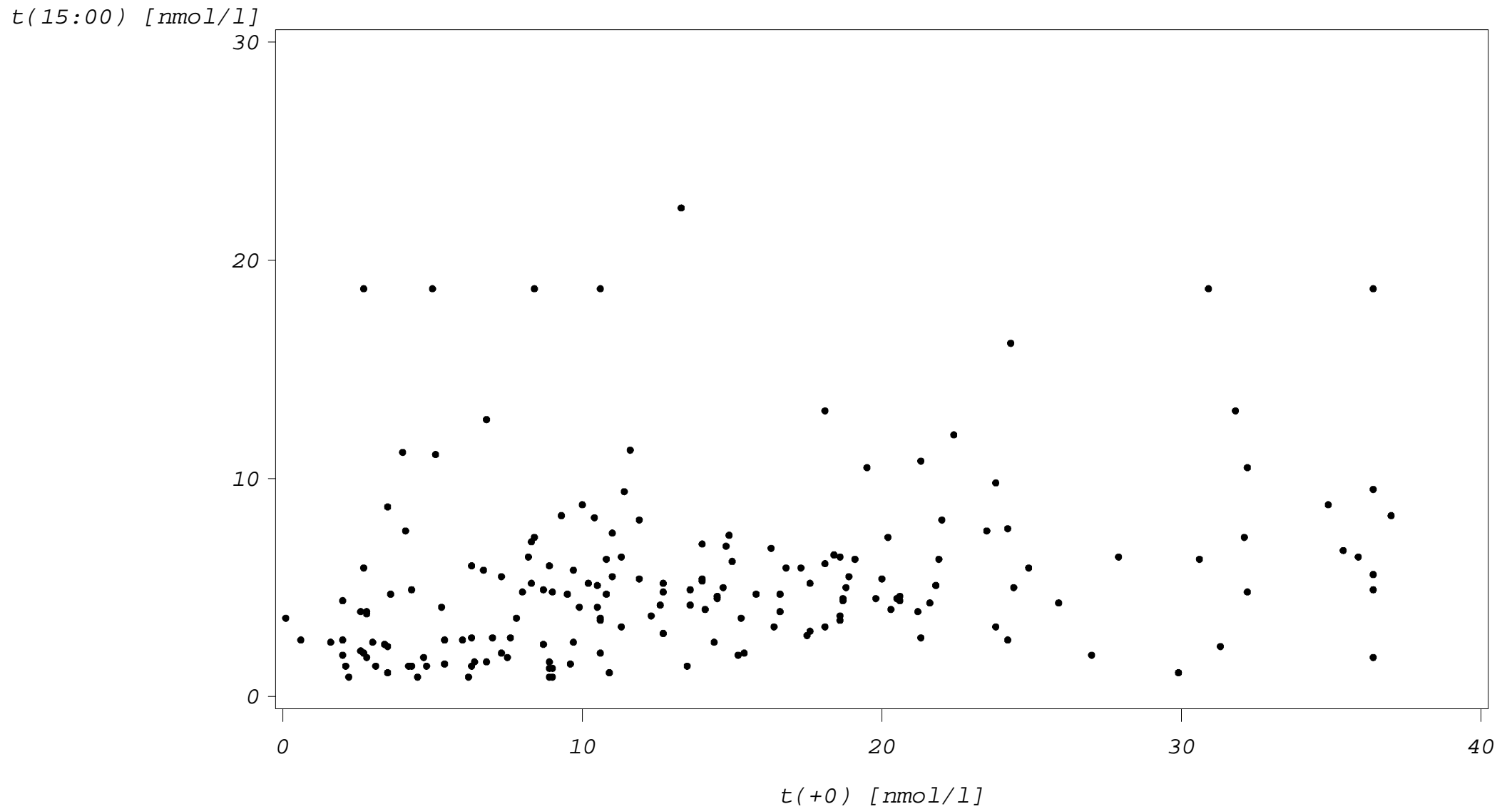
Study 1: effect of awakening cortisol levels

*cortisol levels at $t(+0)$ * cortisol levels at $t(11:00)$*



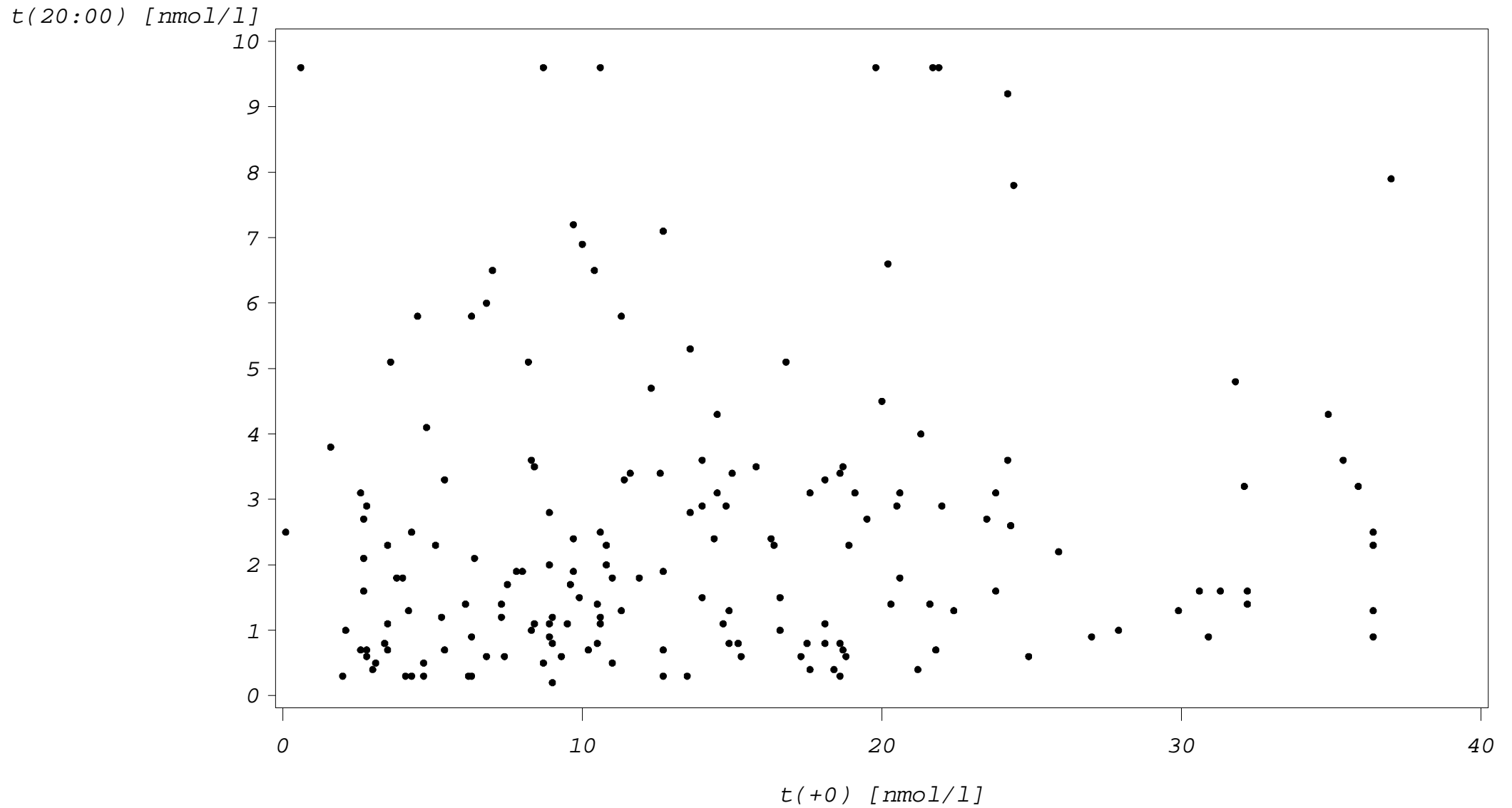
Study 1: effect of awakening cortisol levels

*cortisol levels at $t(+0)$ * cortisol levels at $t(15:00)$*



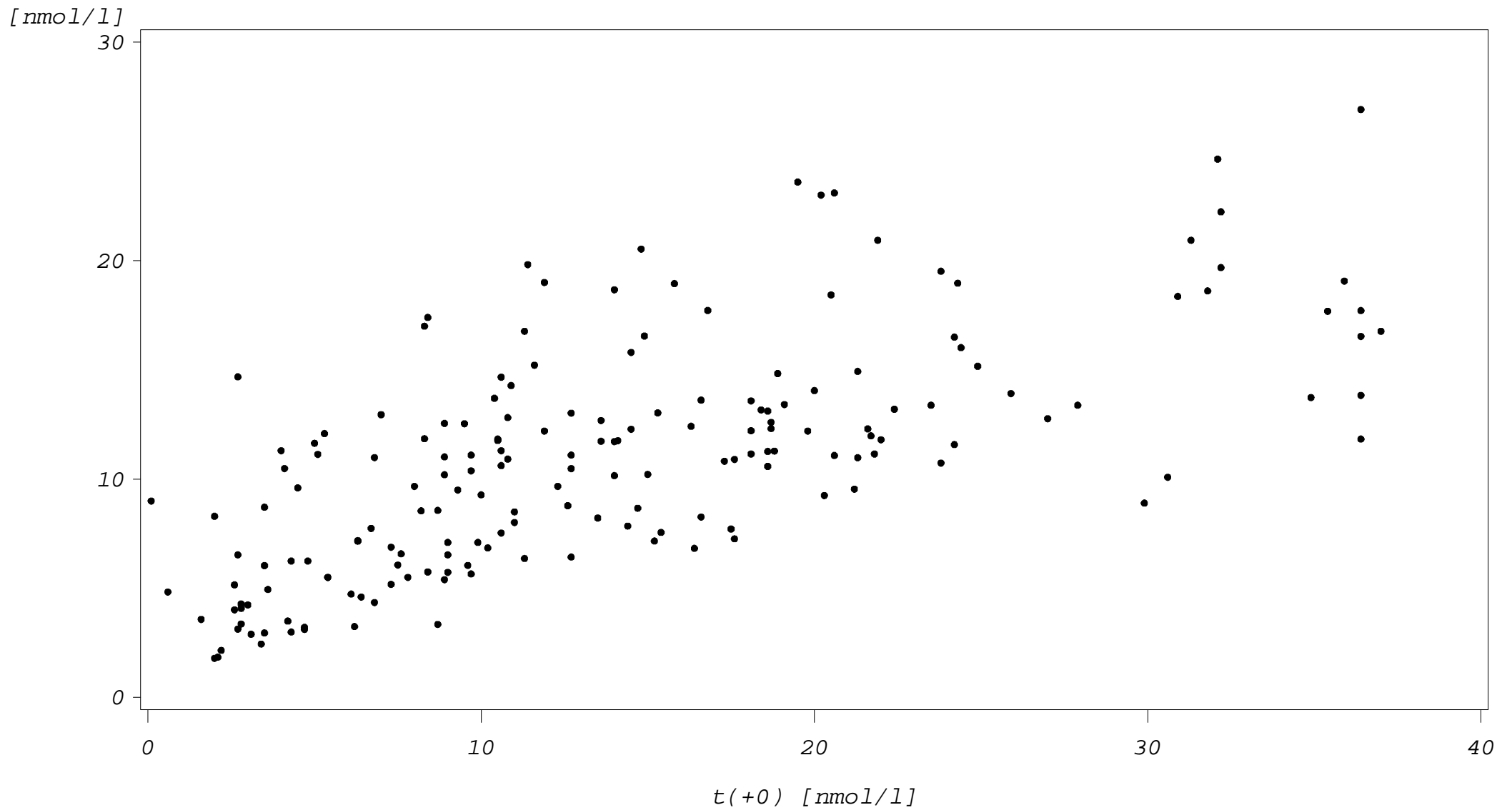
Study 1: effect of awakening cortisol levels

*cortisol levels at $t(+0)$ * cortisol levels at $t(20:00)$*



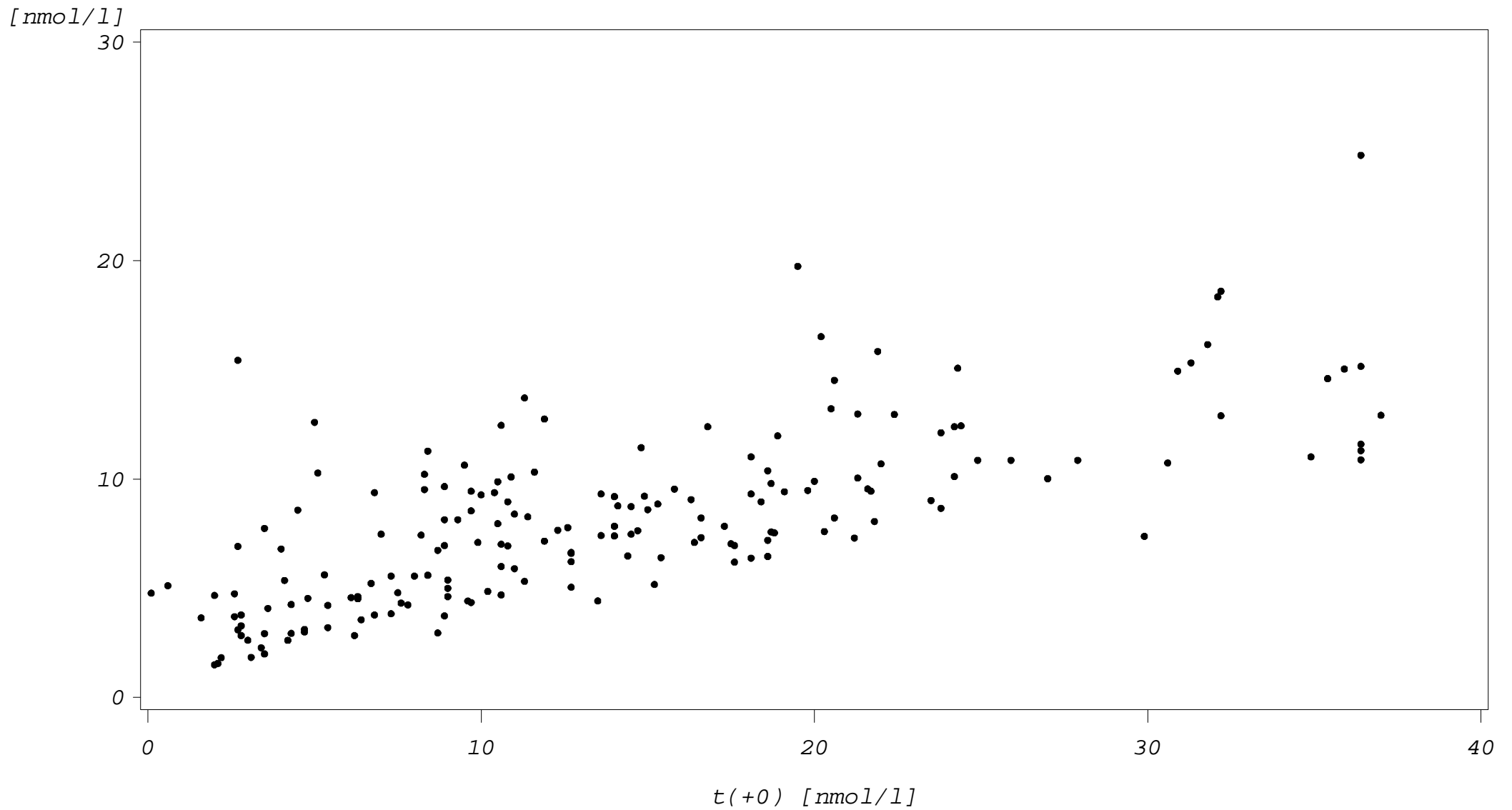
Study 1: effect of awakening cortisol levels

*cortisol levels at $t(+0)$ * diurnal mean (including $t+30$)*



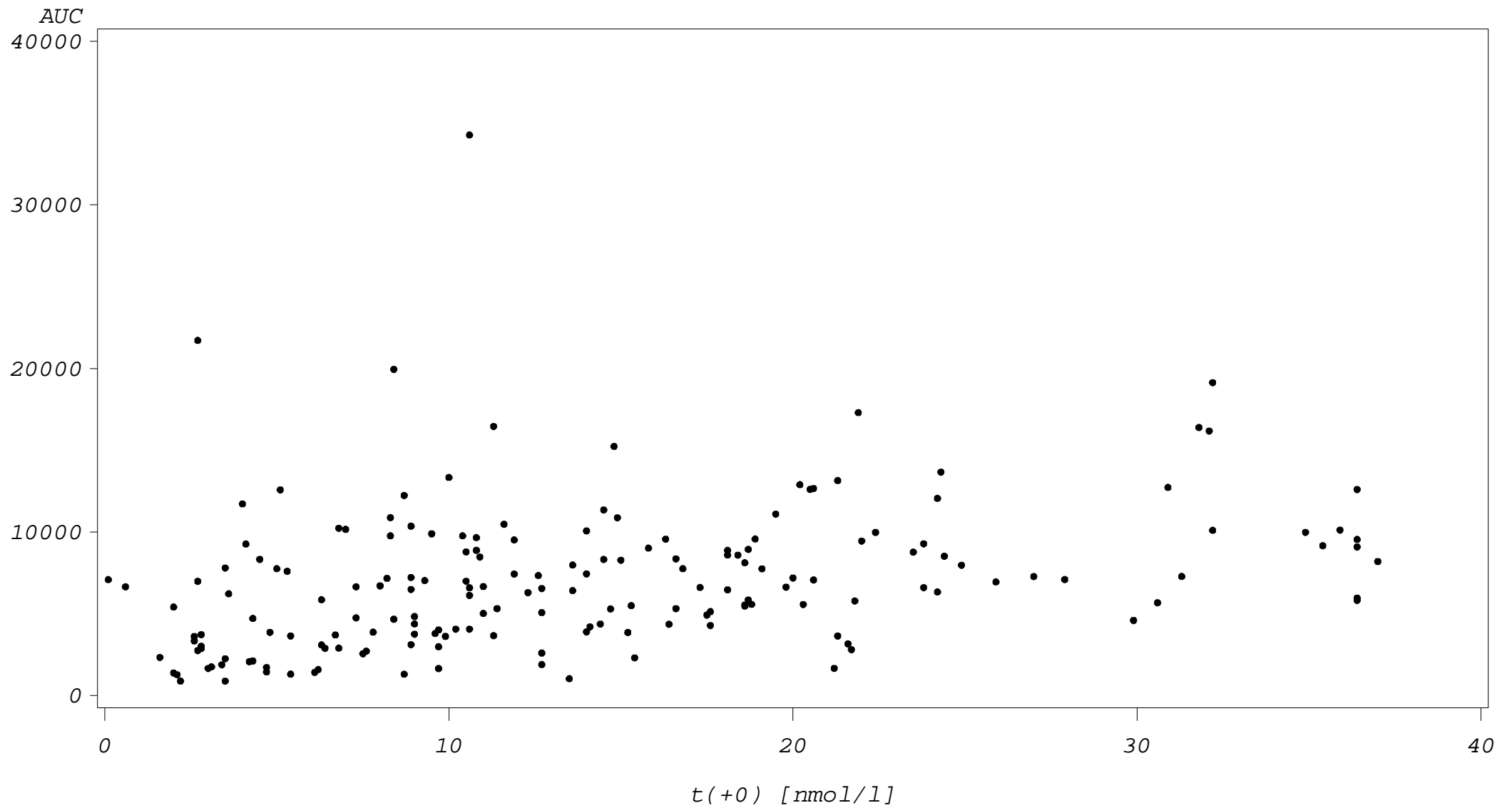
Study 1: effect of awakening cortisol levels

*cortisol levels at $t(+0)$ * diurnal mean (excluding $t+30$)*



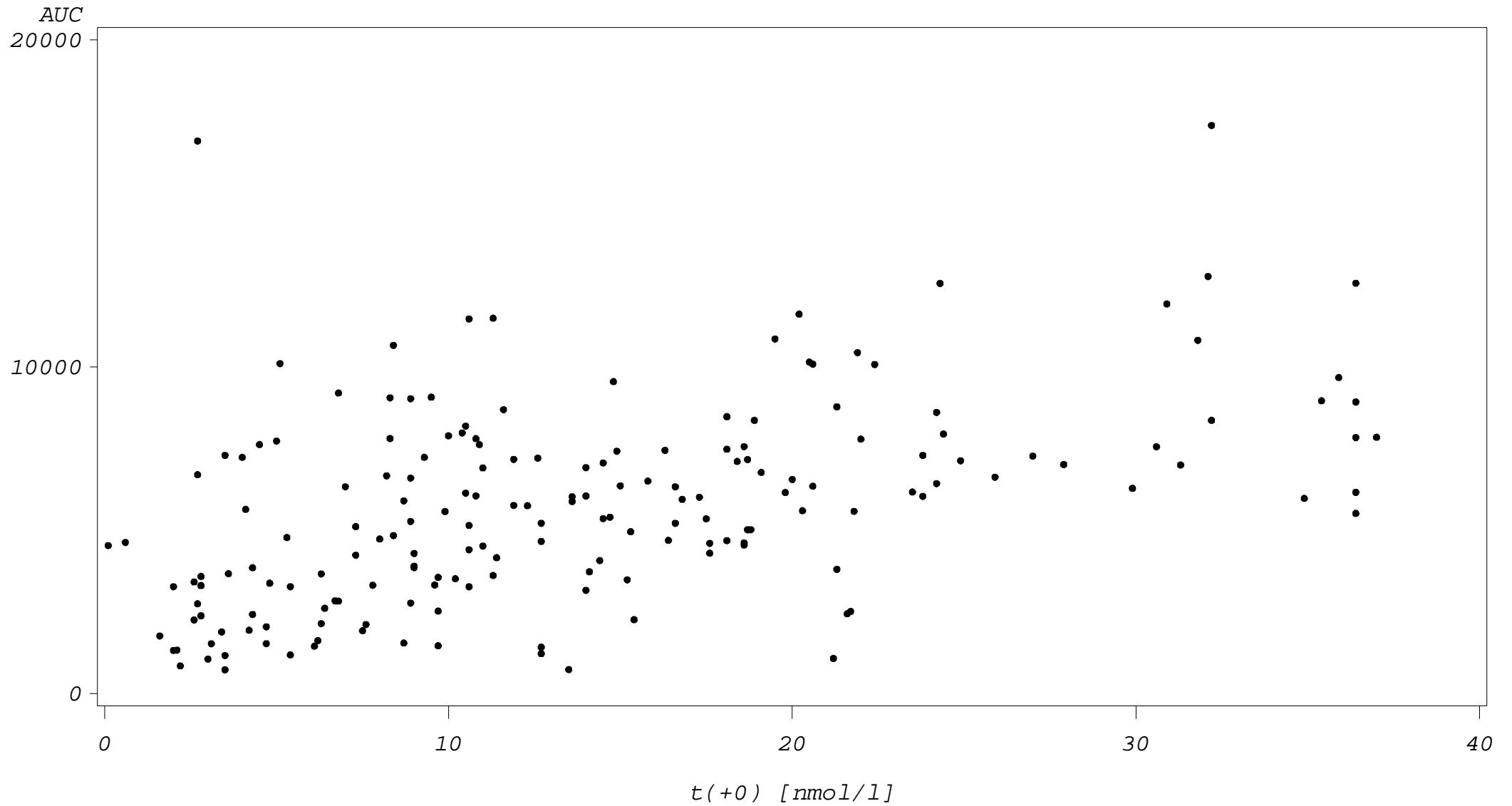
Study 1: effect of awakening cortisol levels

*cortisol levels at $t(+0)$ * AUC (including $t+30$)*



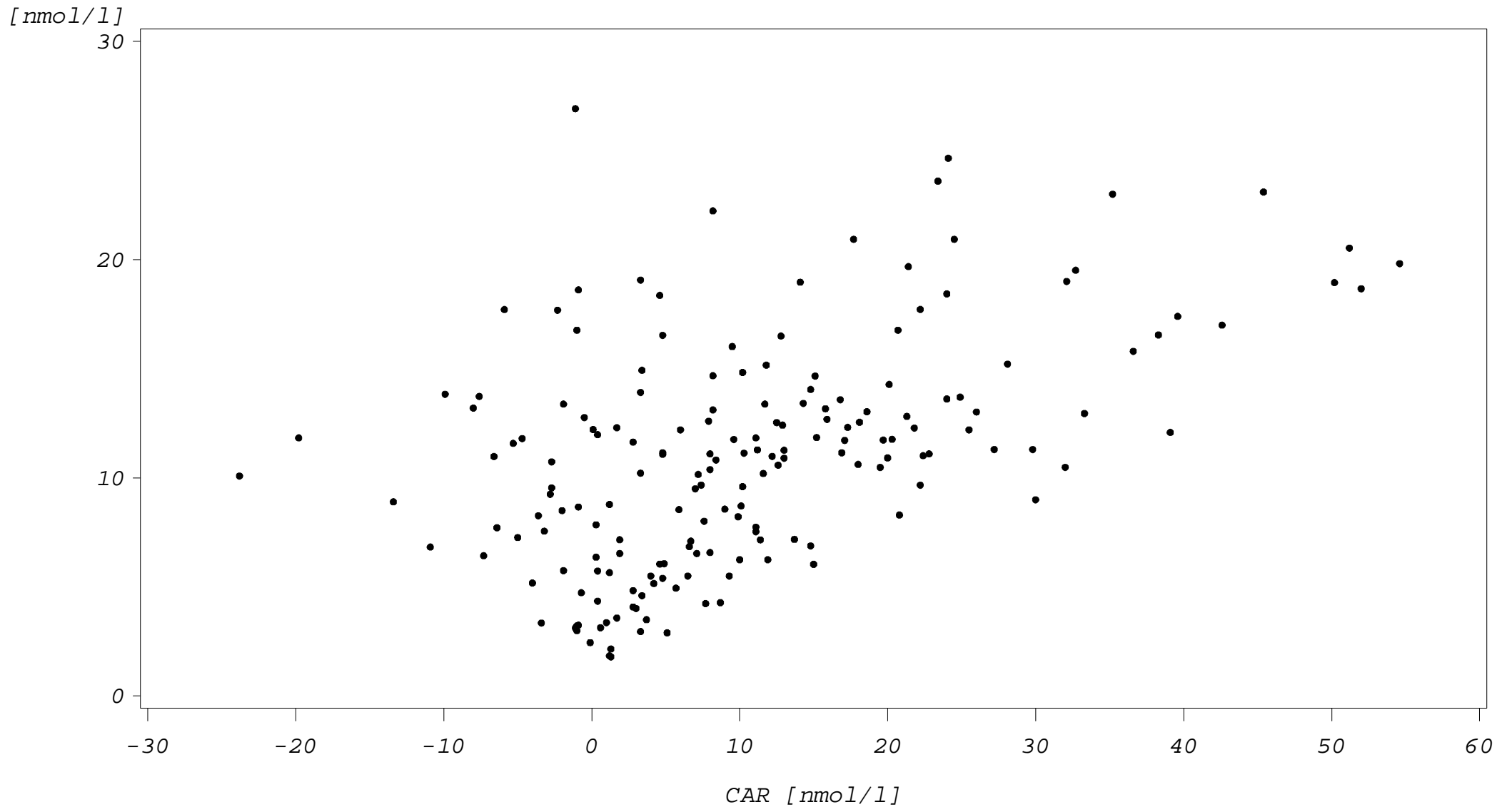
Study 1: effect of awakening cortisol levels

*cortisol levels at $t(+0)$ * AUC (excluding $t+30$)*



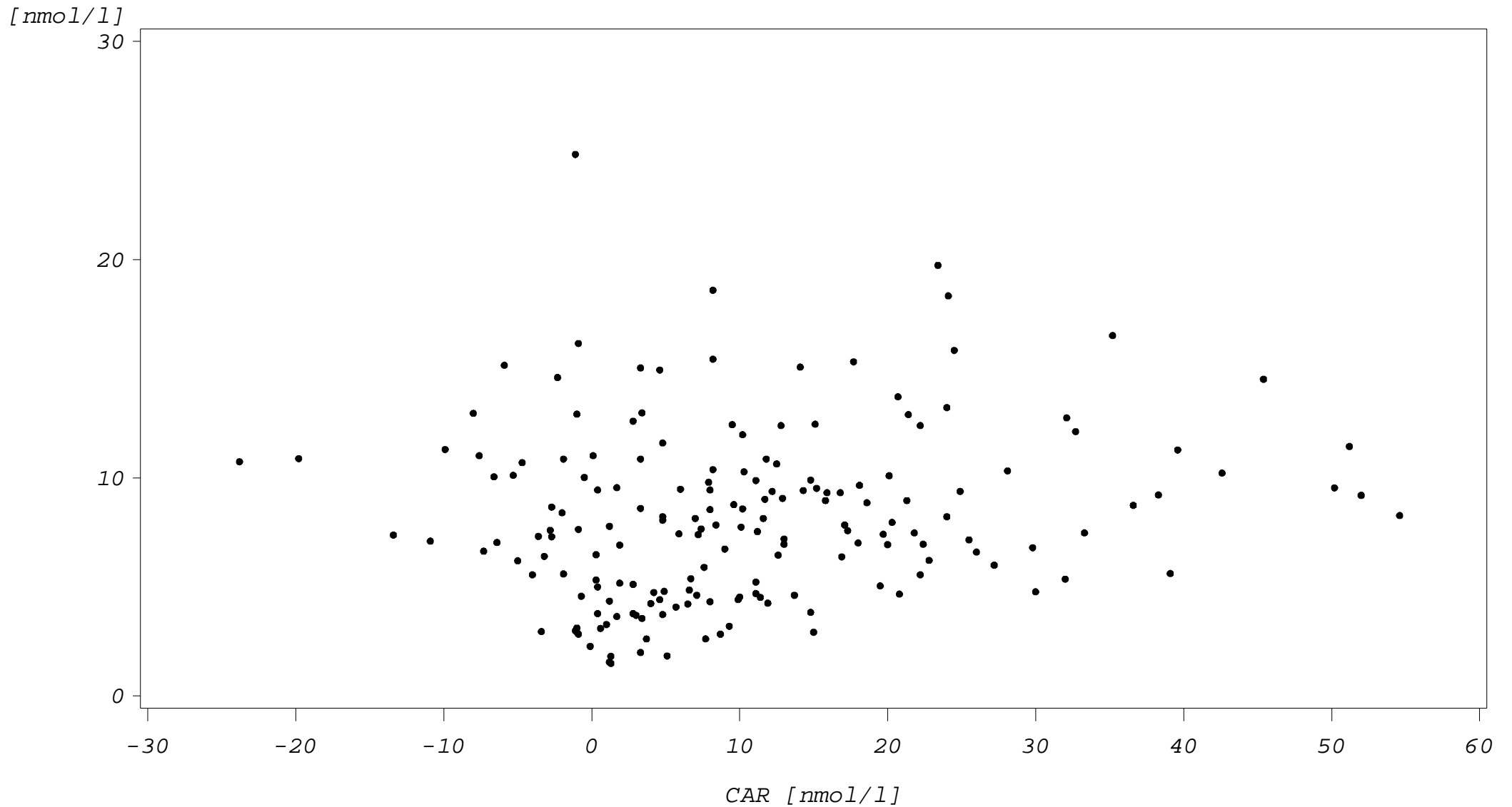
Study 1: effect of awakening cortisol levels

*cortisol awakening rise * diurnal mean (including t+30)*



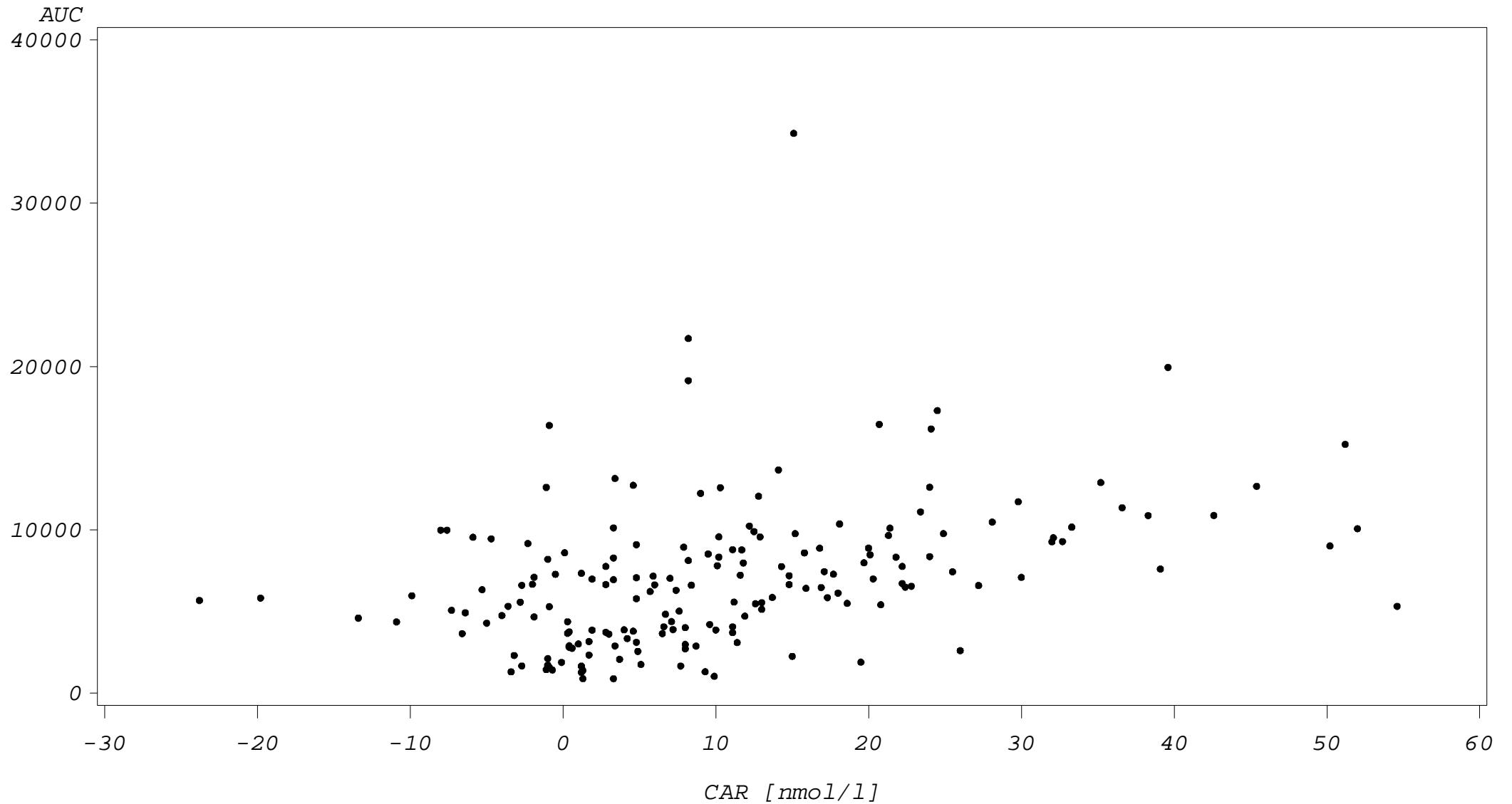
Study 1: effect of awakening cortisol levels

*cortisol awakening rise * diurnal mean (excluding t+30)*



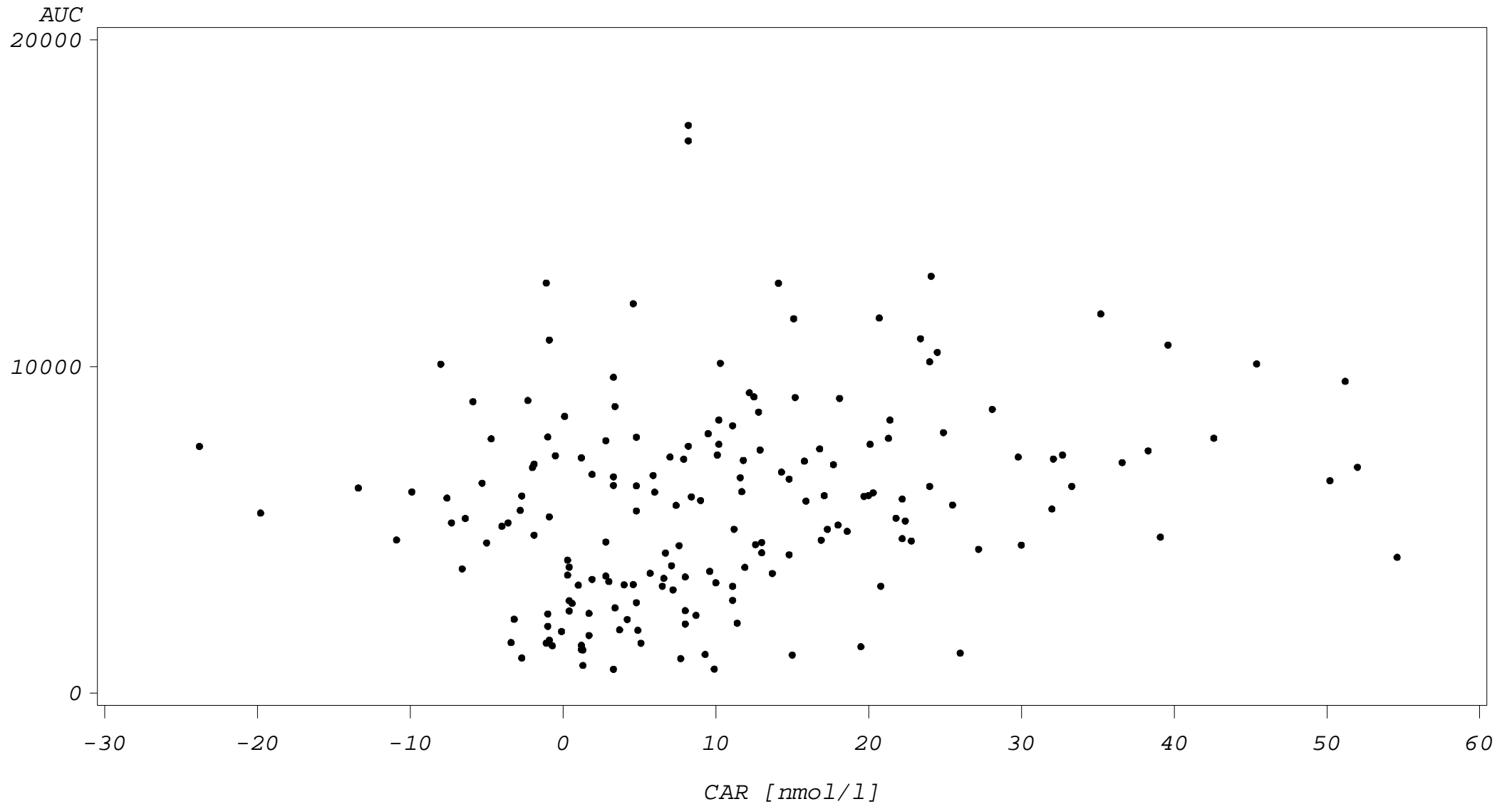
Study 1: effect of awakening cortisol levels

*cortisol awakening rise * AUC (including t+30)*



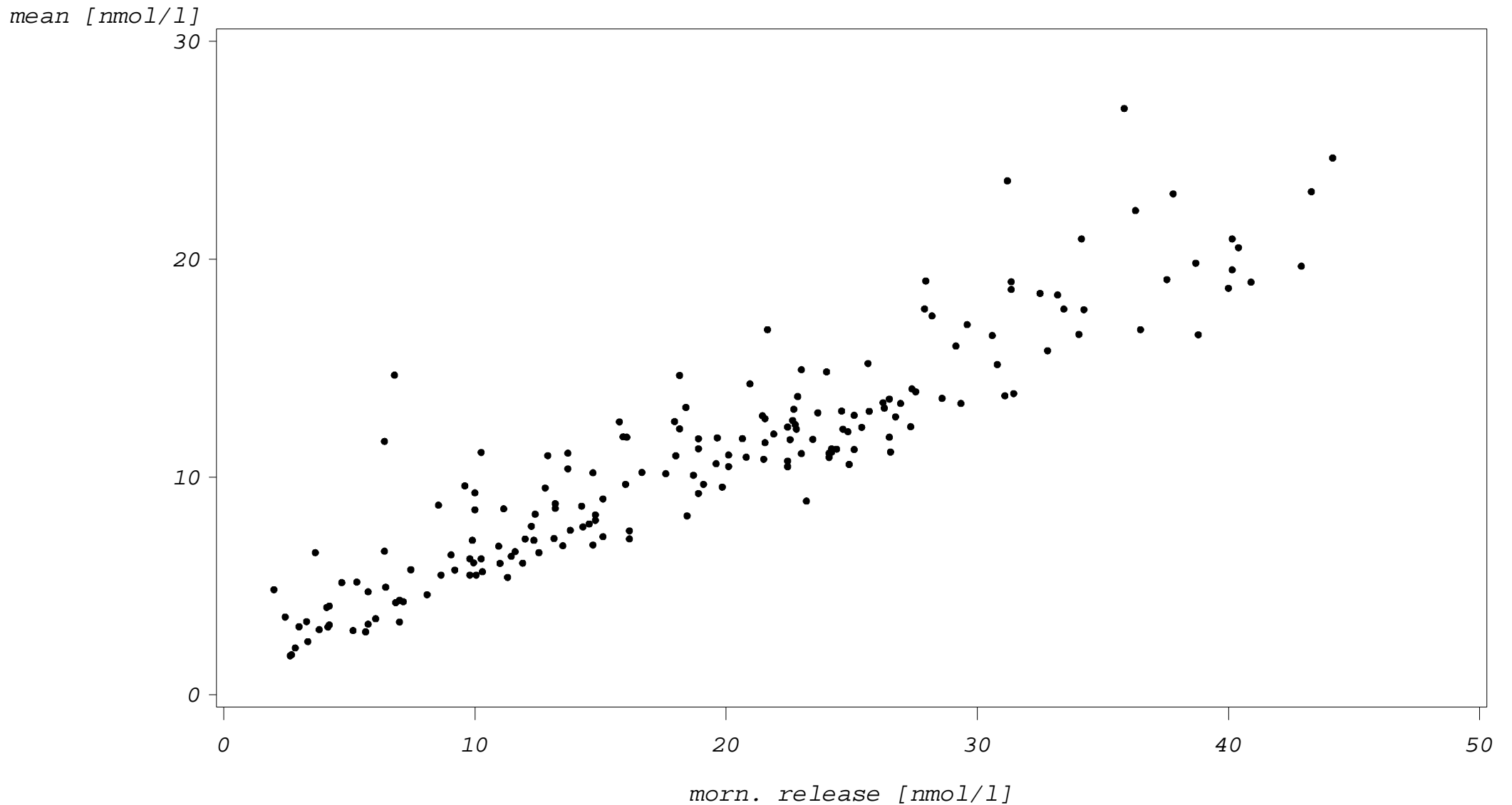
Study 1: effect of awakening cortisol levels

*cortisol awakening rise * AUC (excluding t+30)*



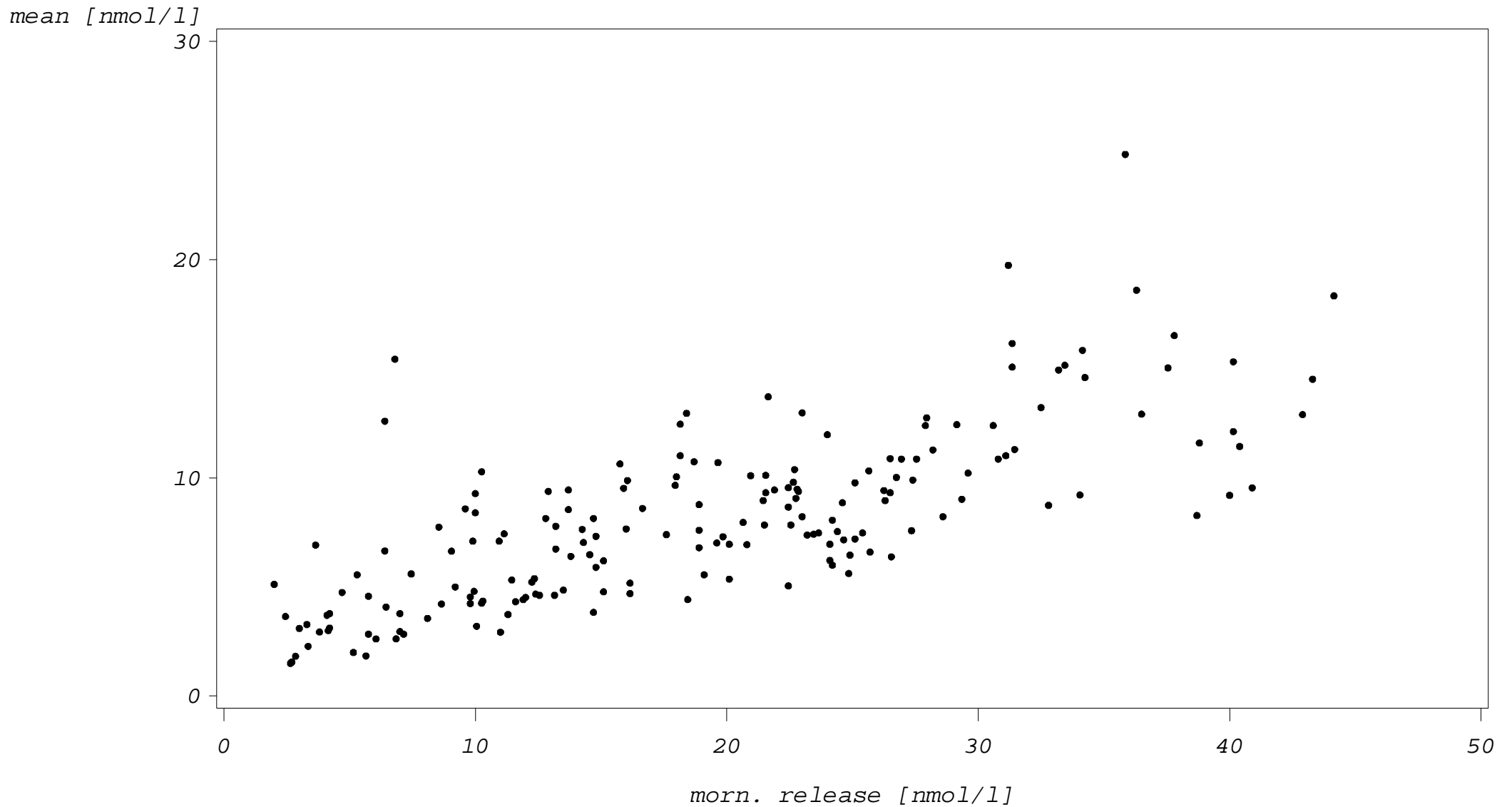
Study 1: effect of awakening cortisol levels

*total morning cortisol release * diurnal mean (including t+30)*



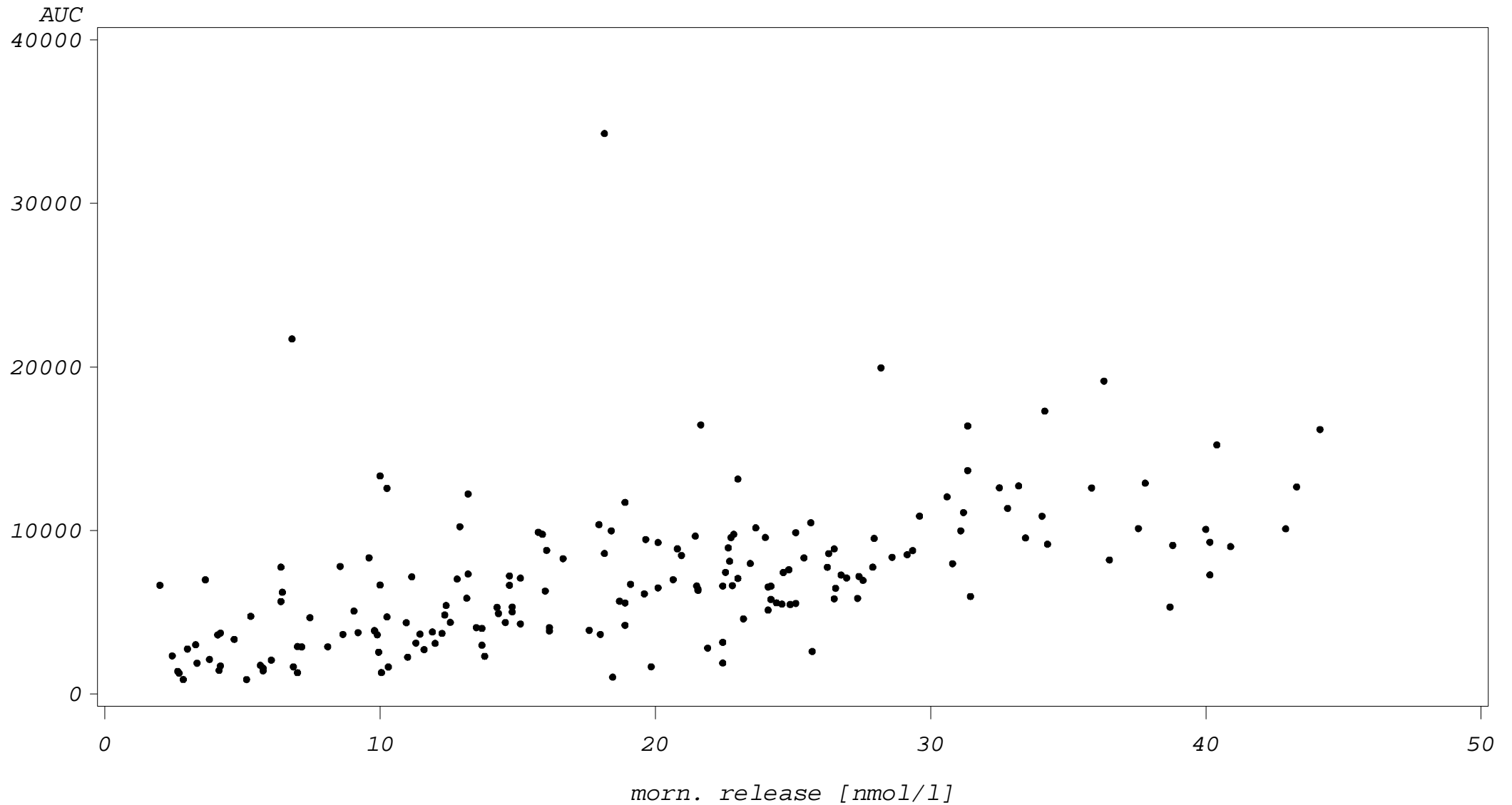
Study 1: effect of awakening cortisol levels

*total morning cortisol release * diurnal mean (excluding t+30)*



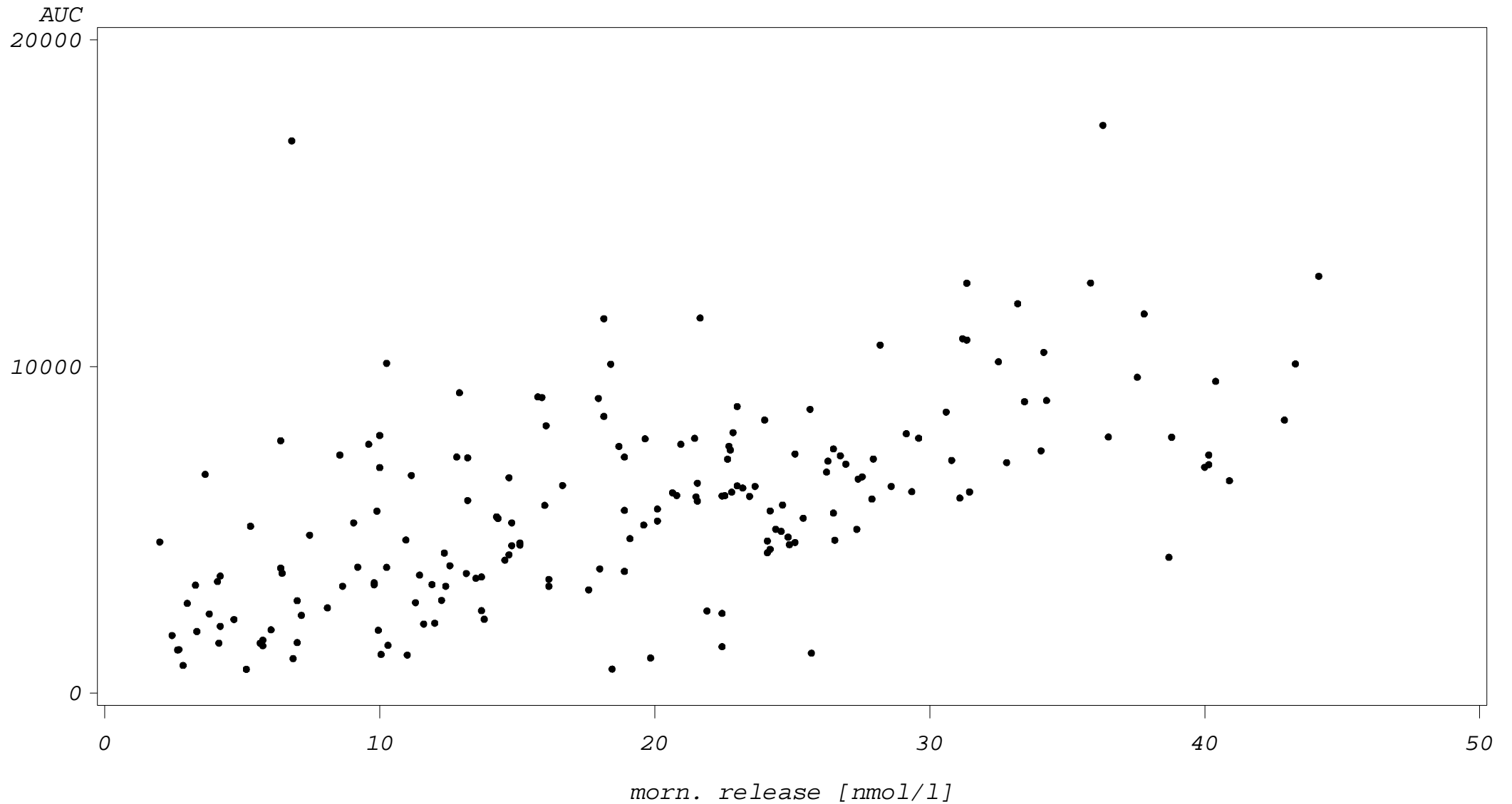
Study 1: effect of awakening cortisol levels

*total morning cortisol release * AUC (including t+30)*



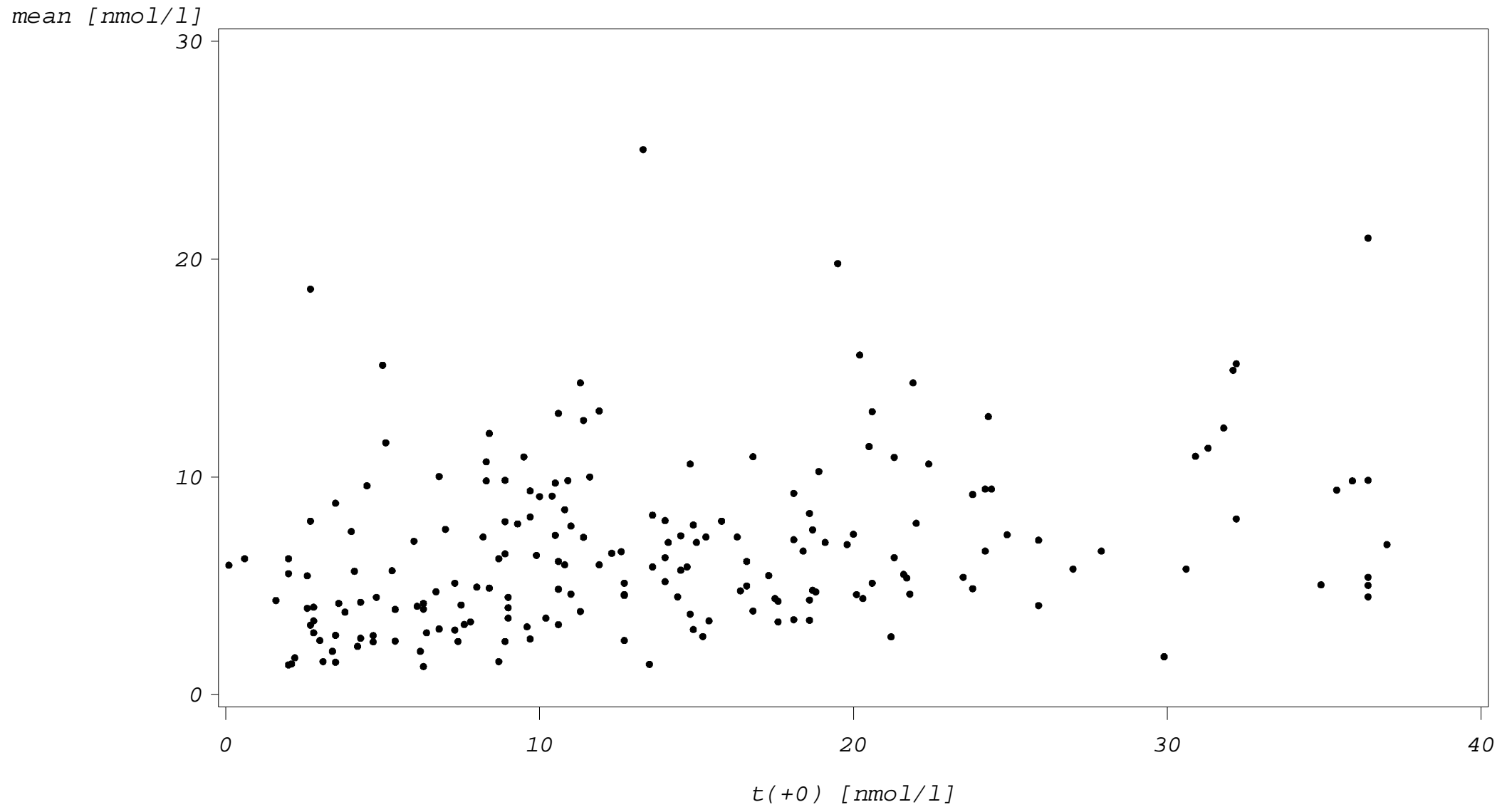
Study 1: effect of awakening cortisol levels

*total morning cortisol release * AUC (excluding t+30)*



Study 1: effect of awakening cortisol levels

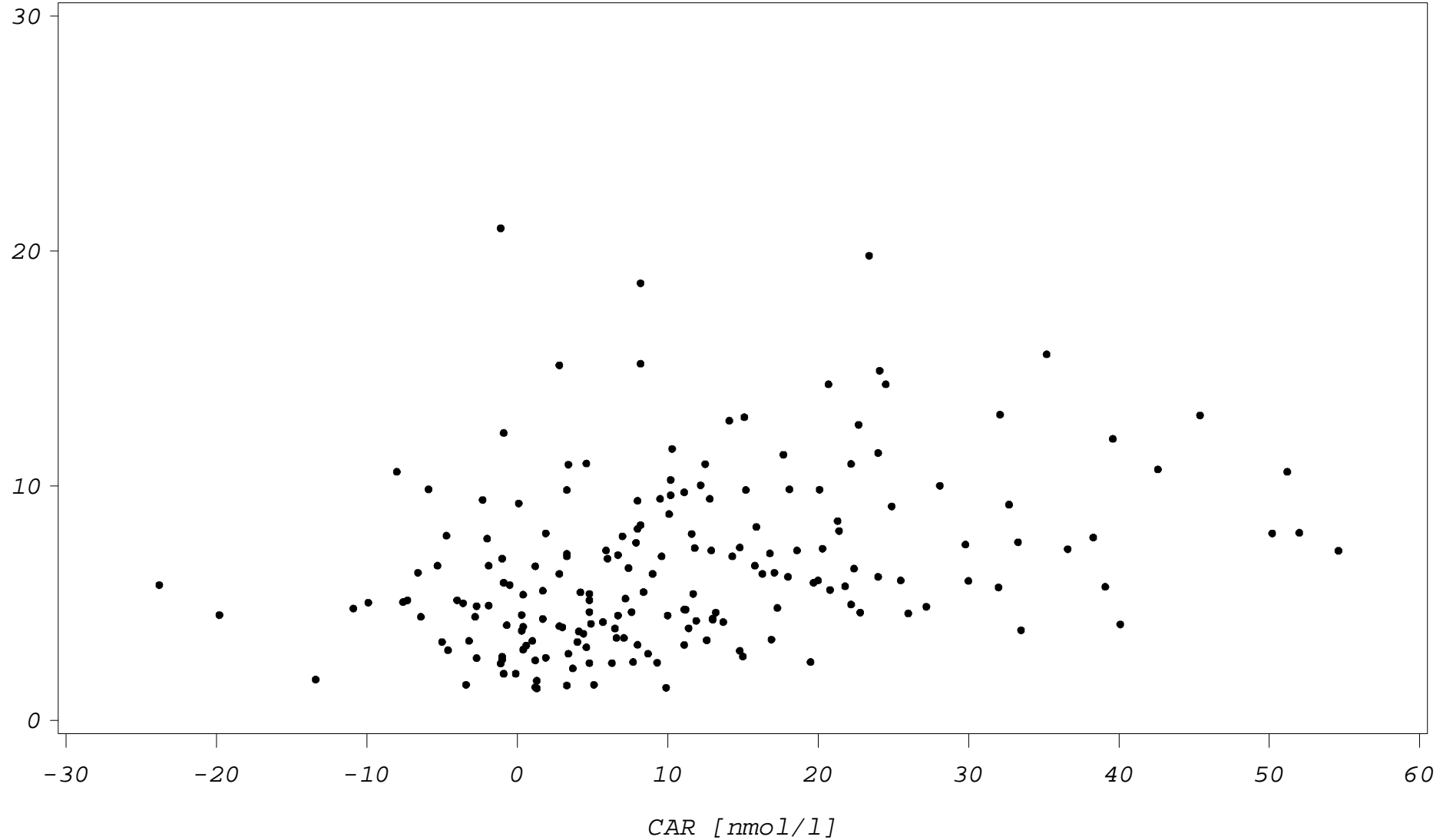
*cortisol levels at $t(+0)$ * diurnal mean (08:00-20:00)*



Study 1: effect of awakening cortisol levels

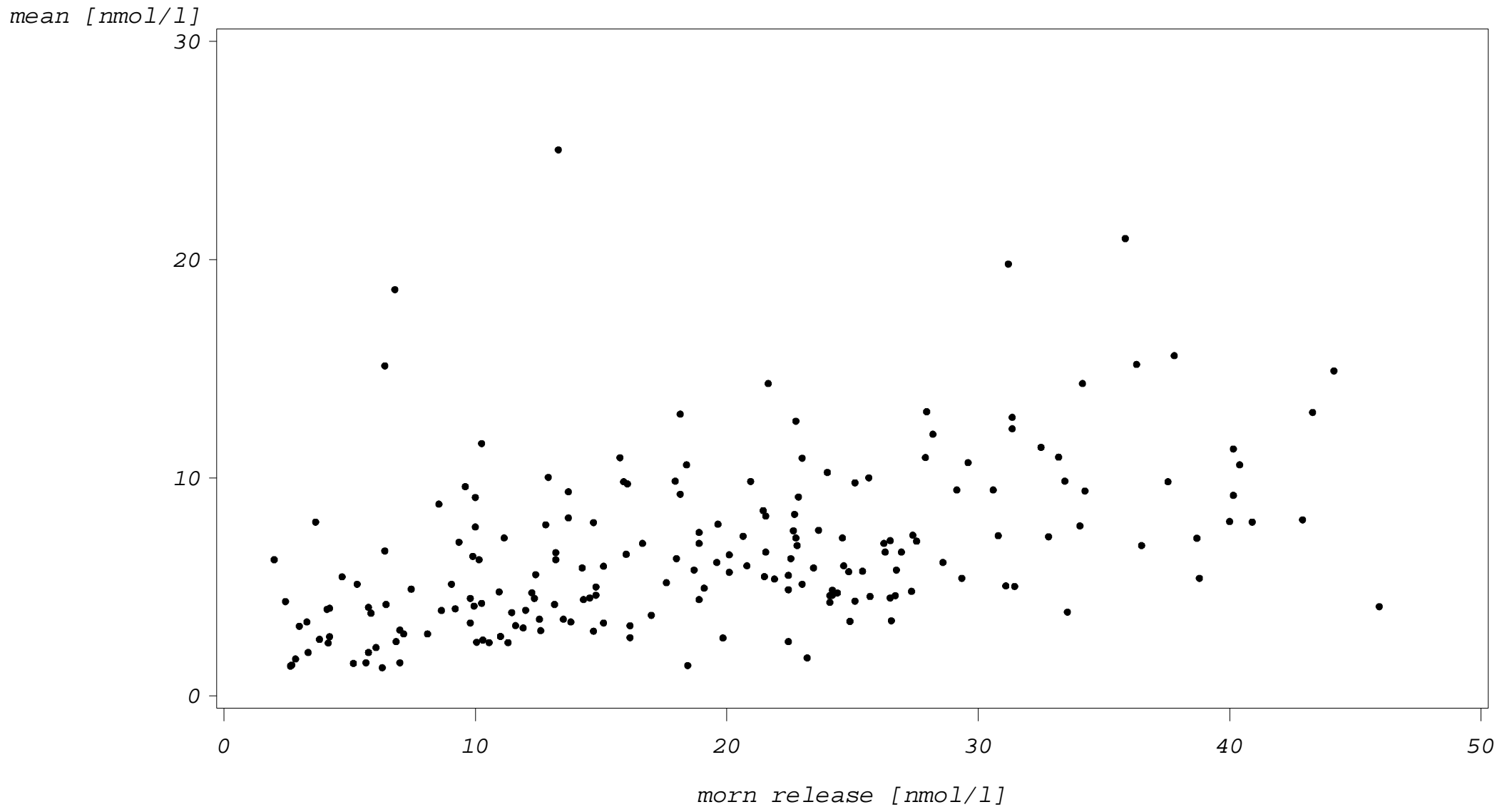
*cortisol awakening rise * diurnal mean (08:00-20:00)*

mean [nmol/l]



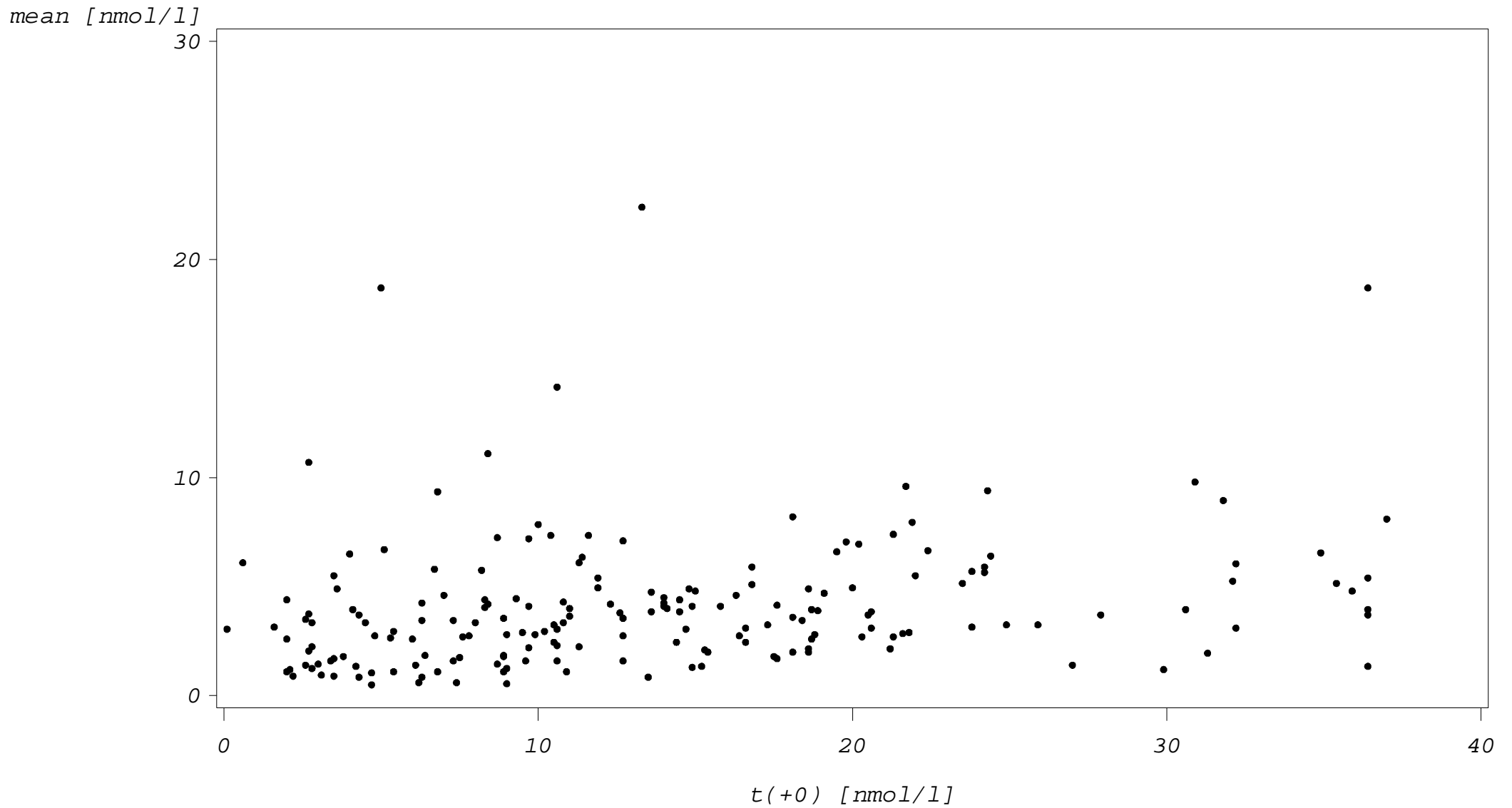
Study 1: effect of awakening cortisol levels

*total morning cortisol release * diurnal mean (08:00-20:00)*



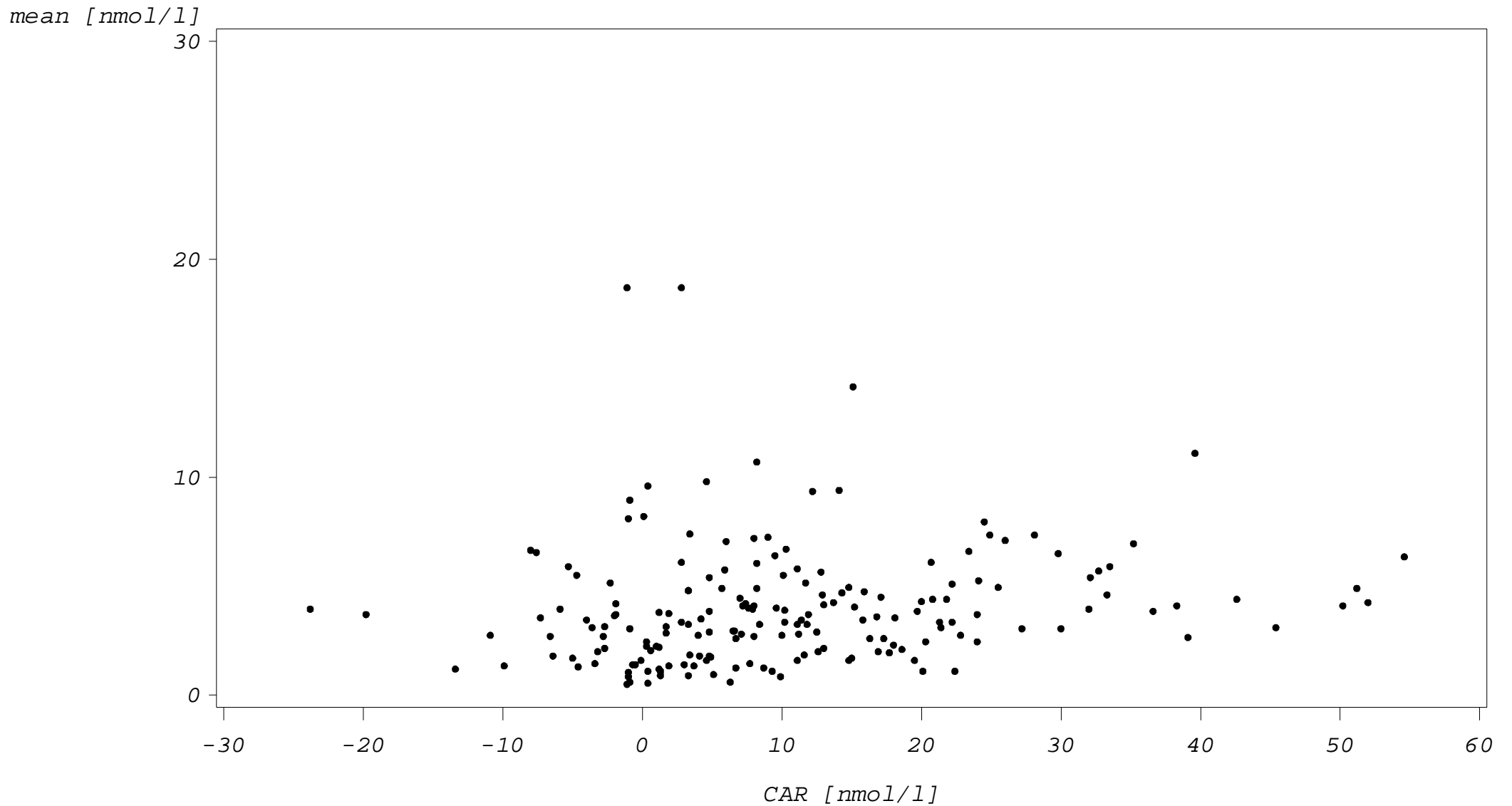
Study 1: effect of awakening cortisol levels

*cortisol levels at $t(+0)$ * diurnal mean (15:00-20:00)*



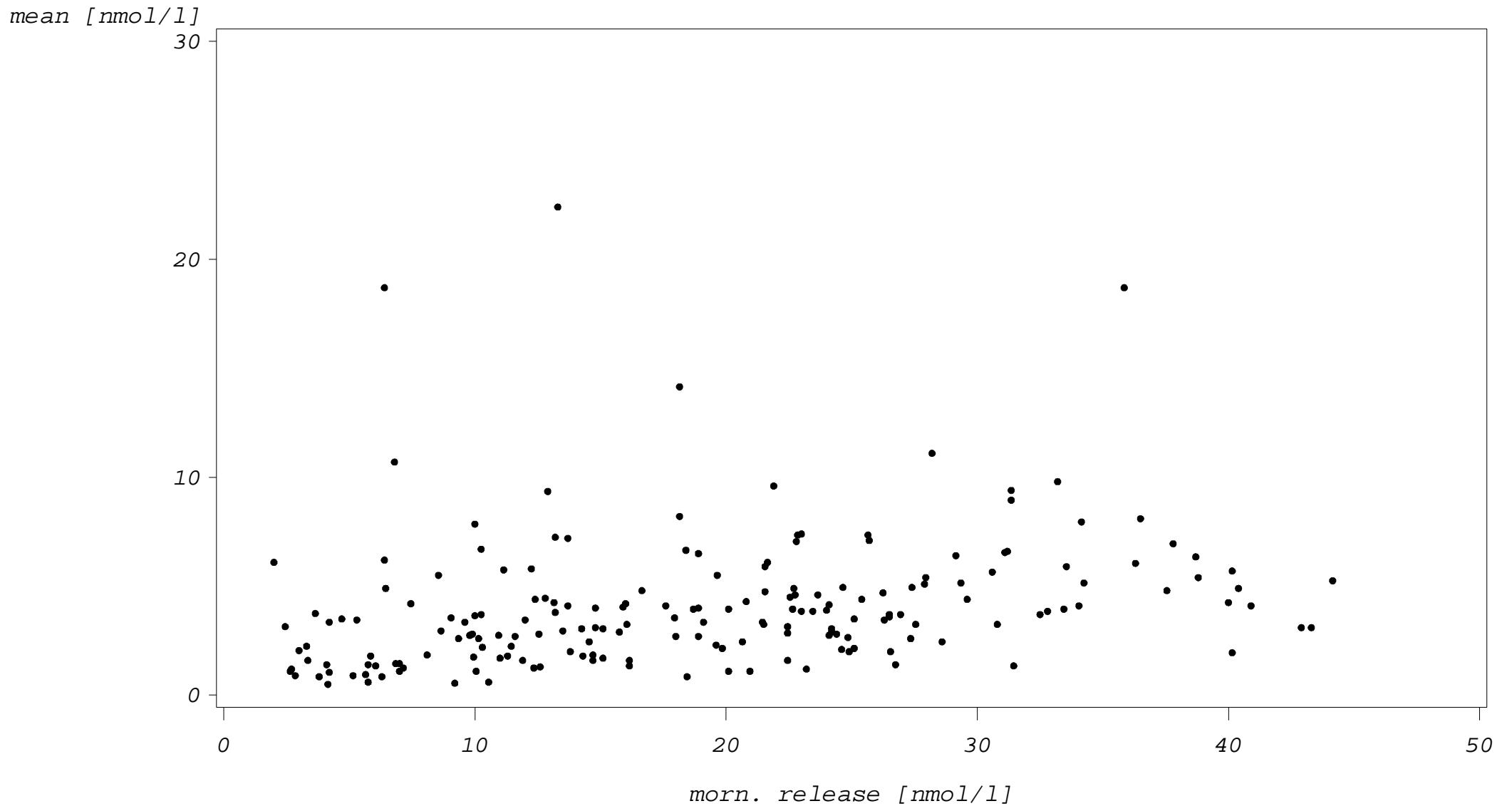
Study 1: effect of awakening cortisol levels

*cortisol awakening rise * diurnal mean (15:00-20:00)*



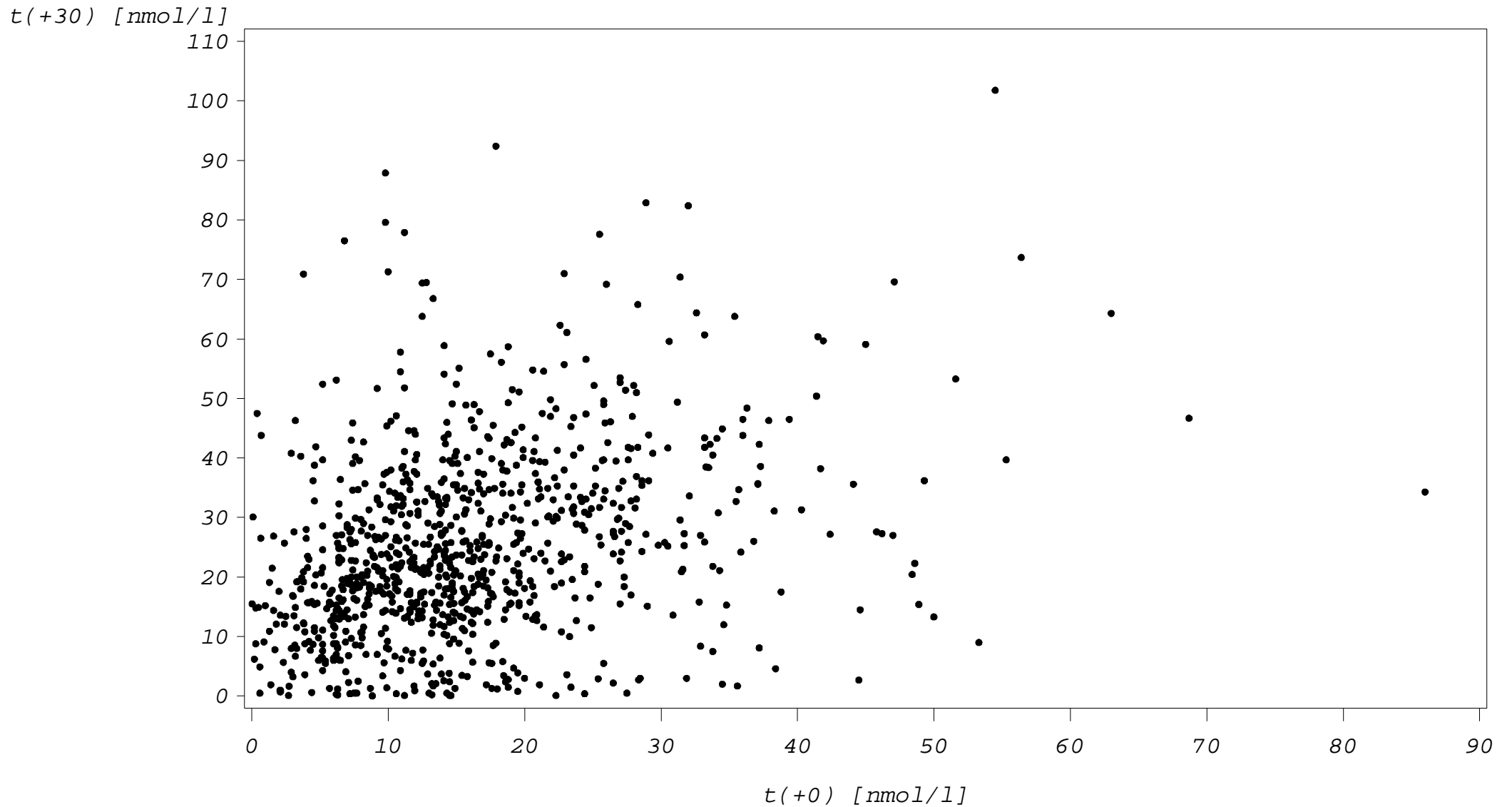
Study 1: effect of awakening cortisol levels

*total morning cortisol release * diurnal mean (15:00-20:00)*



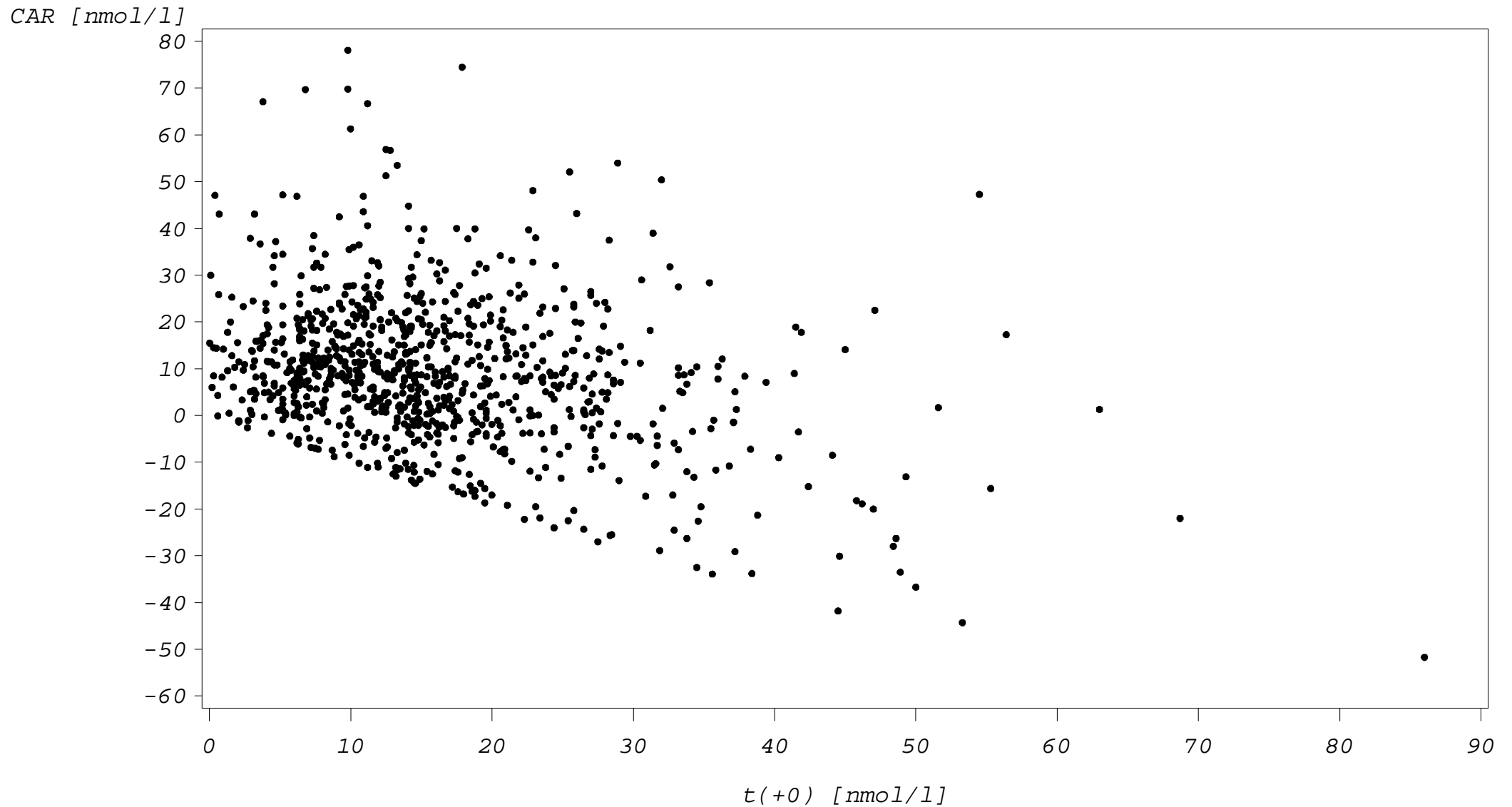
Study 2: effect of awakening cortisol levels

*cortisol levels at $t(+0)$ * cortisol levels at $t(+30)$*



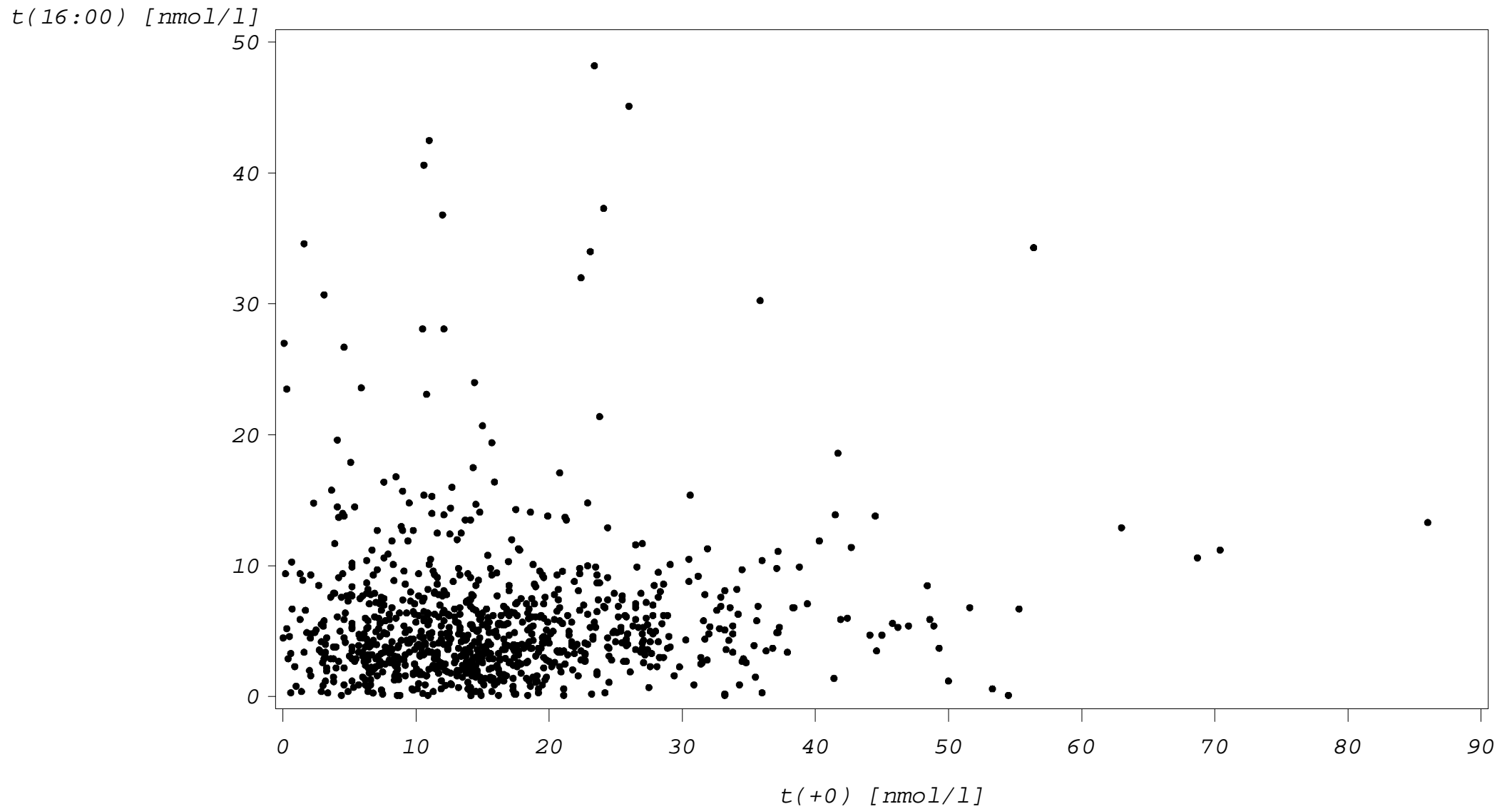
Study 2: effect of awakening cortisol levels

*cortisol levels at $t(+0)$ * cortisol awakening rise*



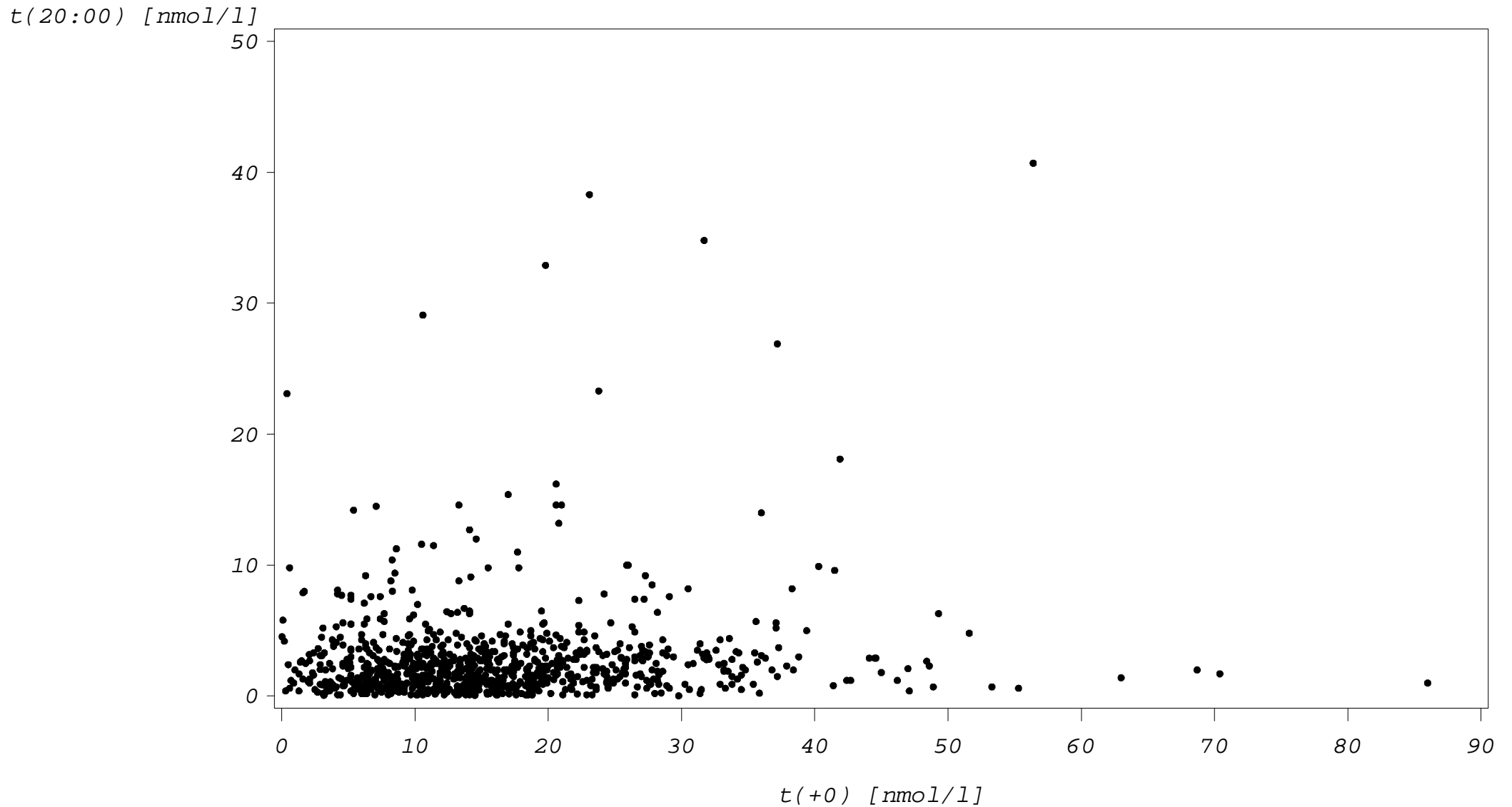
Study 2: effect of awakening cortisol levels

*cortisol levels at $t(+0)$ * cortisol levels at $t(16:00)$*



Study 2: effect of awakening cortisol levels

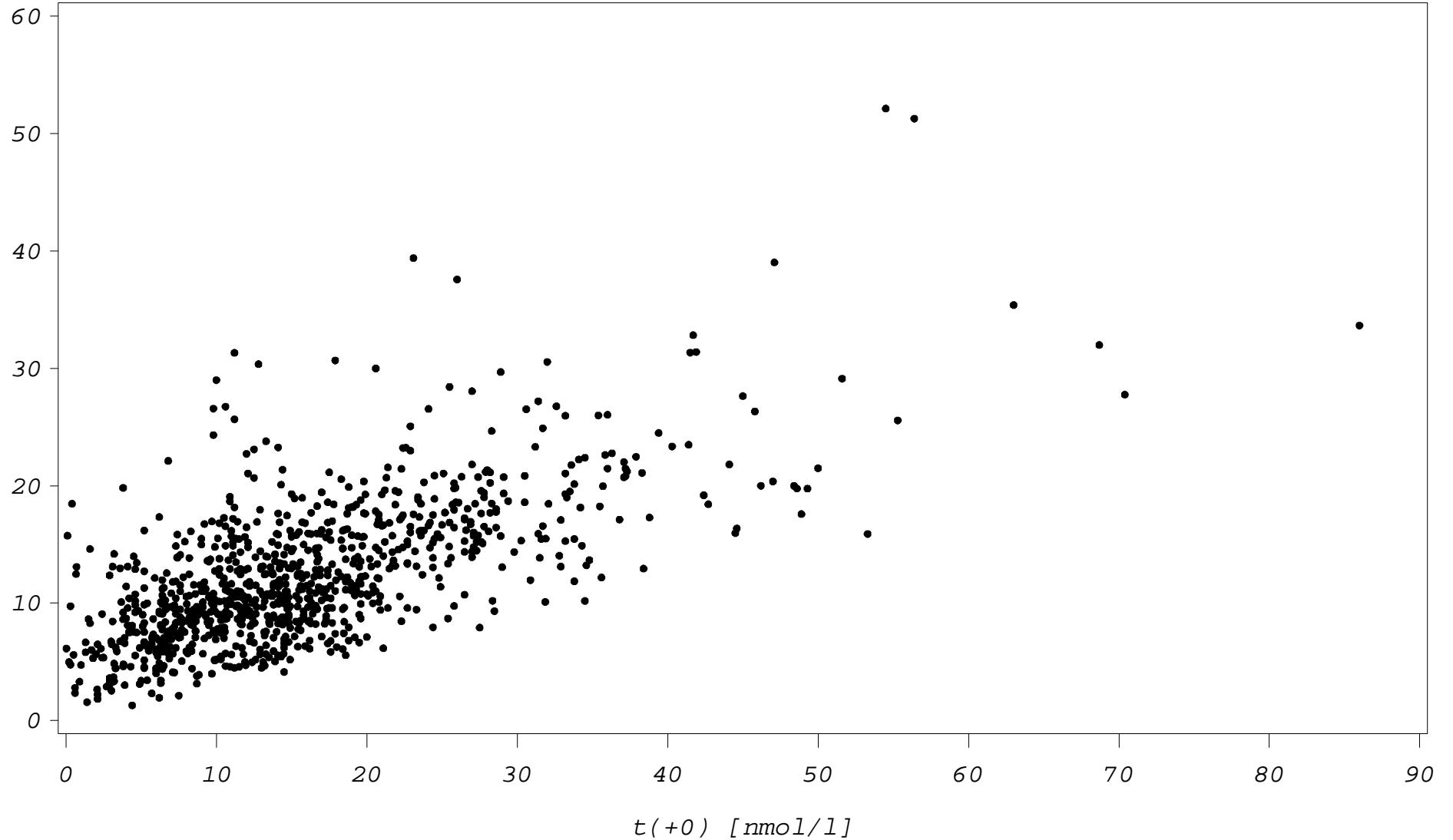
*cortisol levels at $t(+0)$ * cortisol levels at $t(20:00)$*



Study 2: effect of awakening cortisol levels

*cortisol levels at $t(+0)$ * diurnal mean (including $t+30$)*

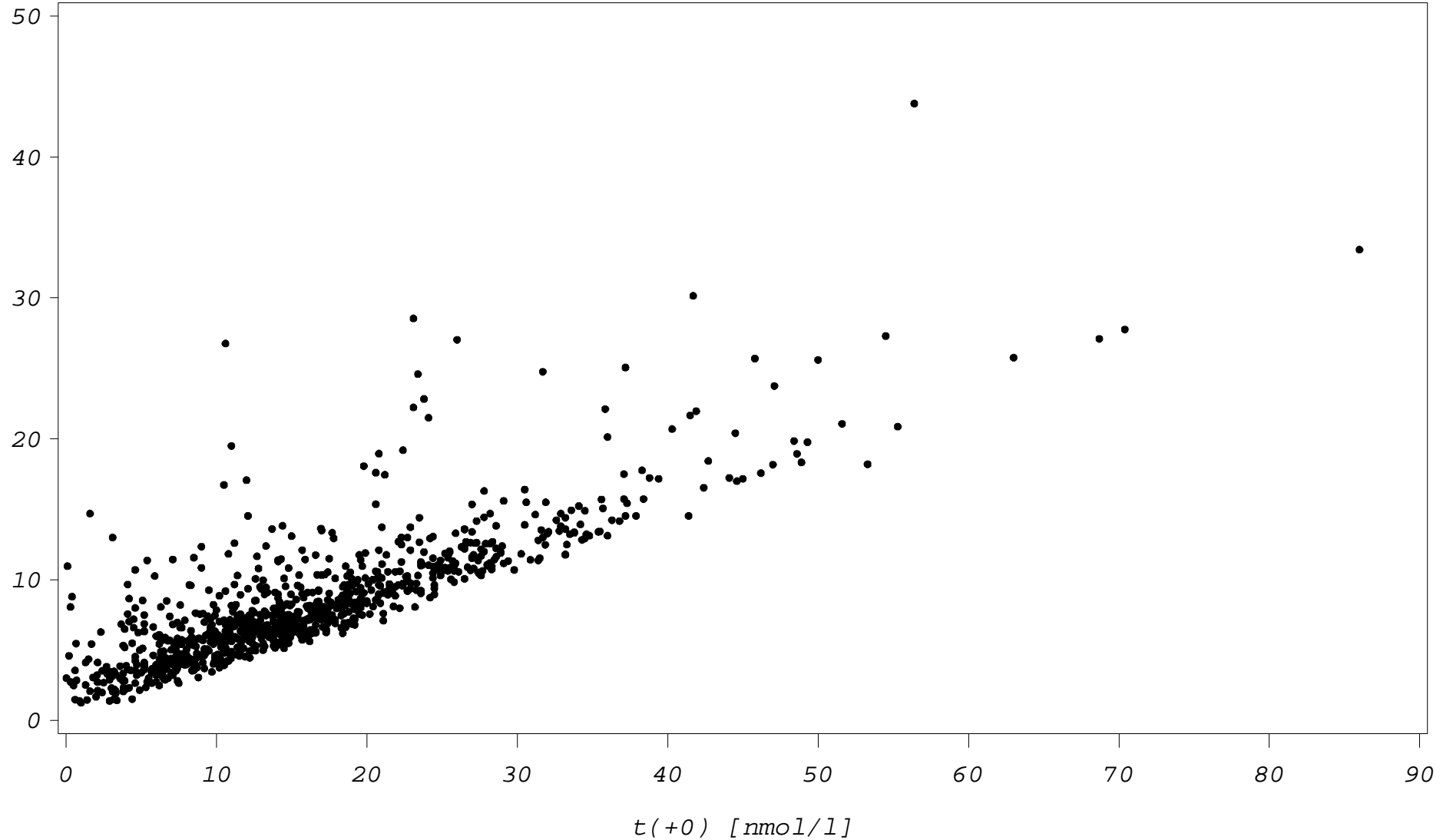
mean [nmol/l]



Study 2: effect of awakening cortisol levels

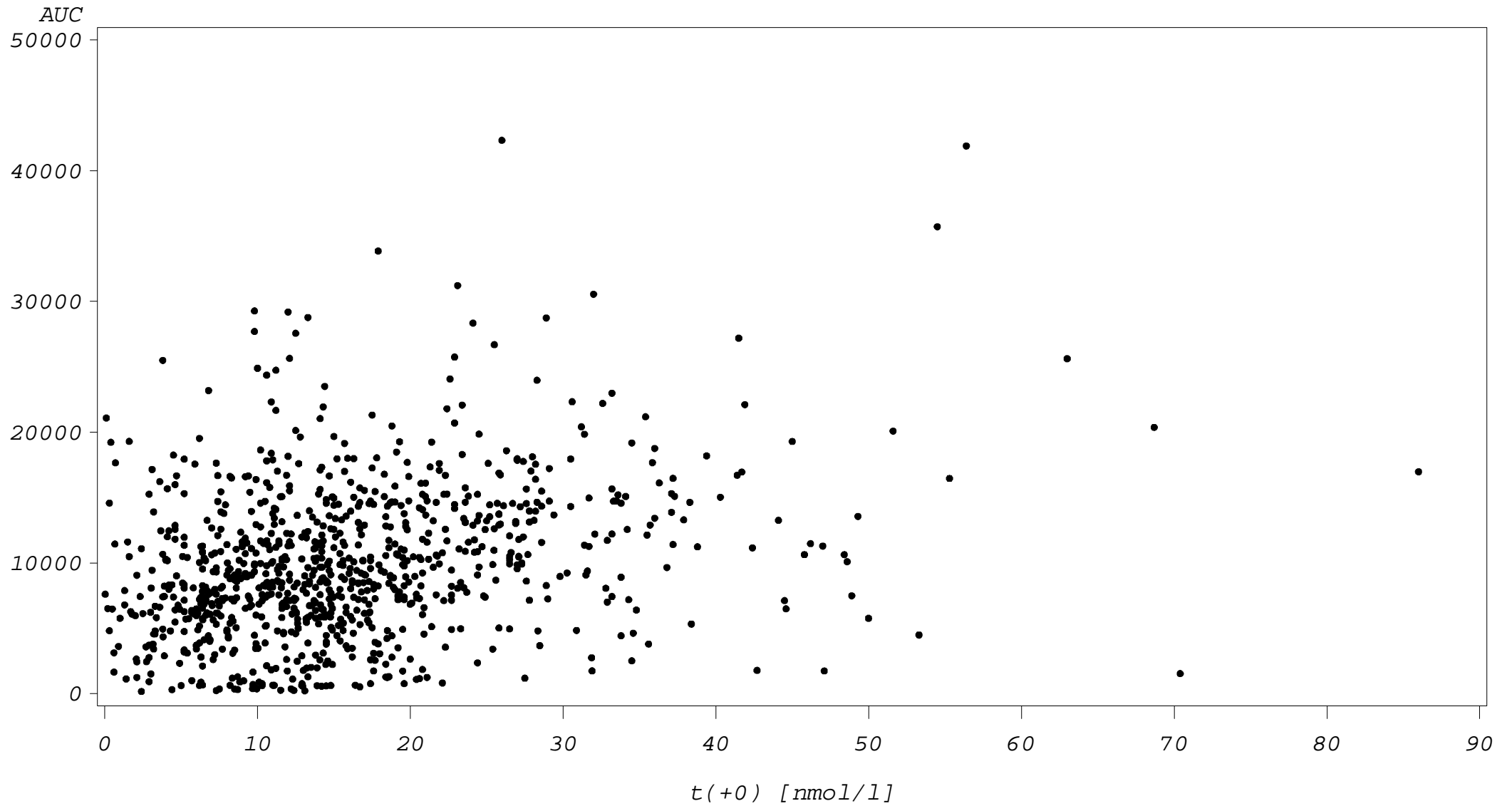
*cortisol levels at $t(+0)$ * diurnal mean (excluding $t+30$)*

mean [nmol/l]



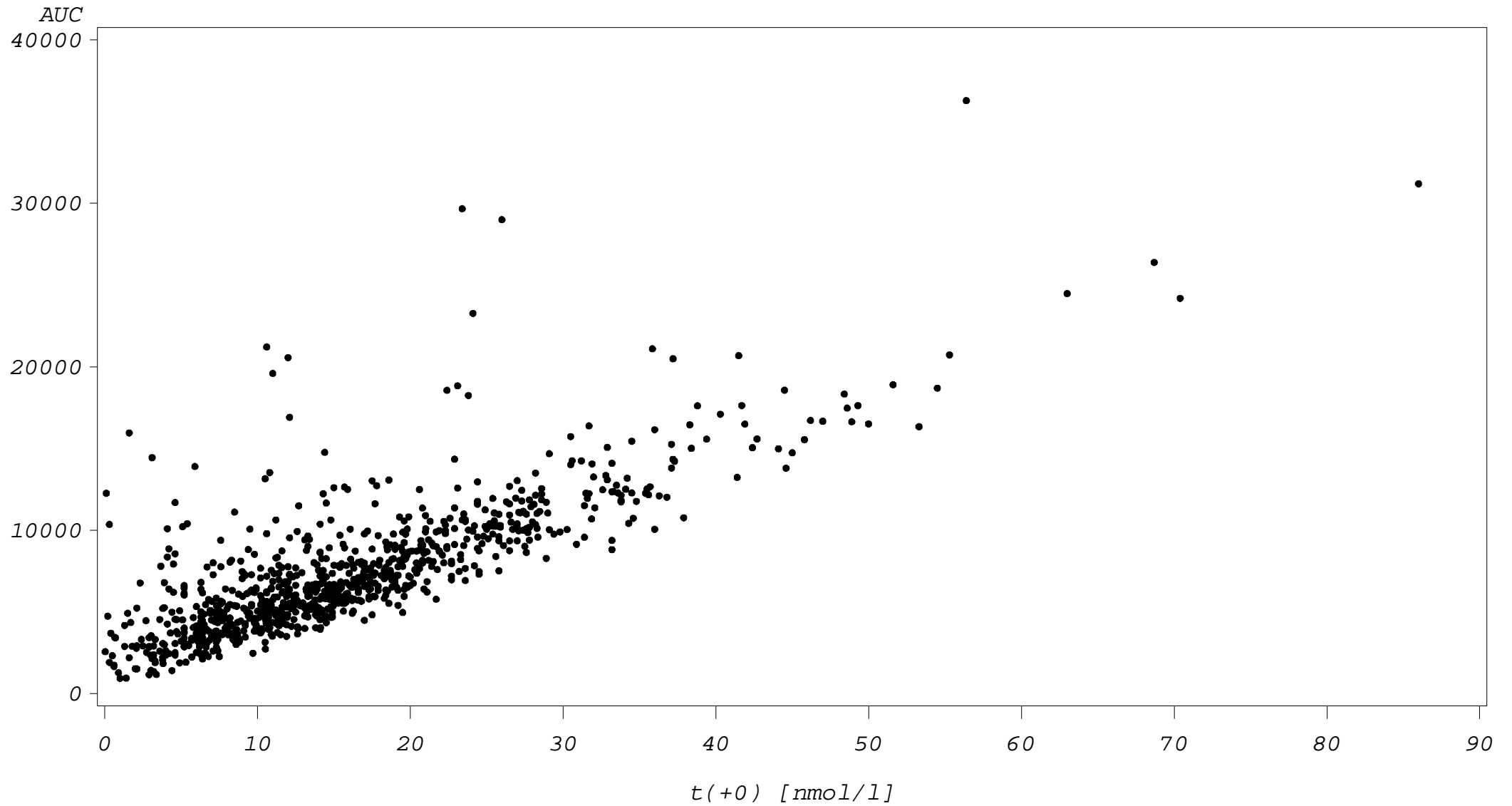
Study 2: effect of awakening cortisol levels

*cortisol levels at $t(+0)$ * AUC (including $t+30$)*



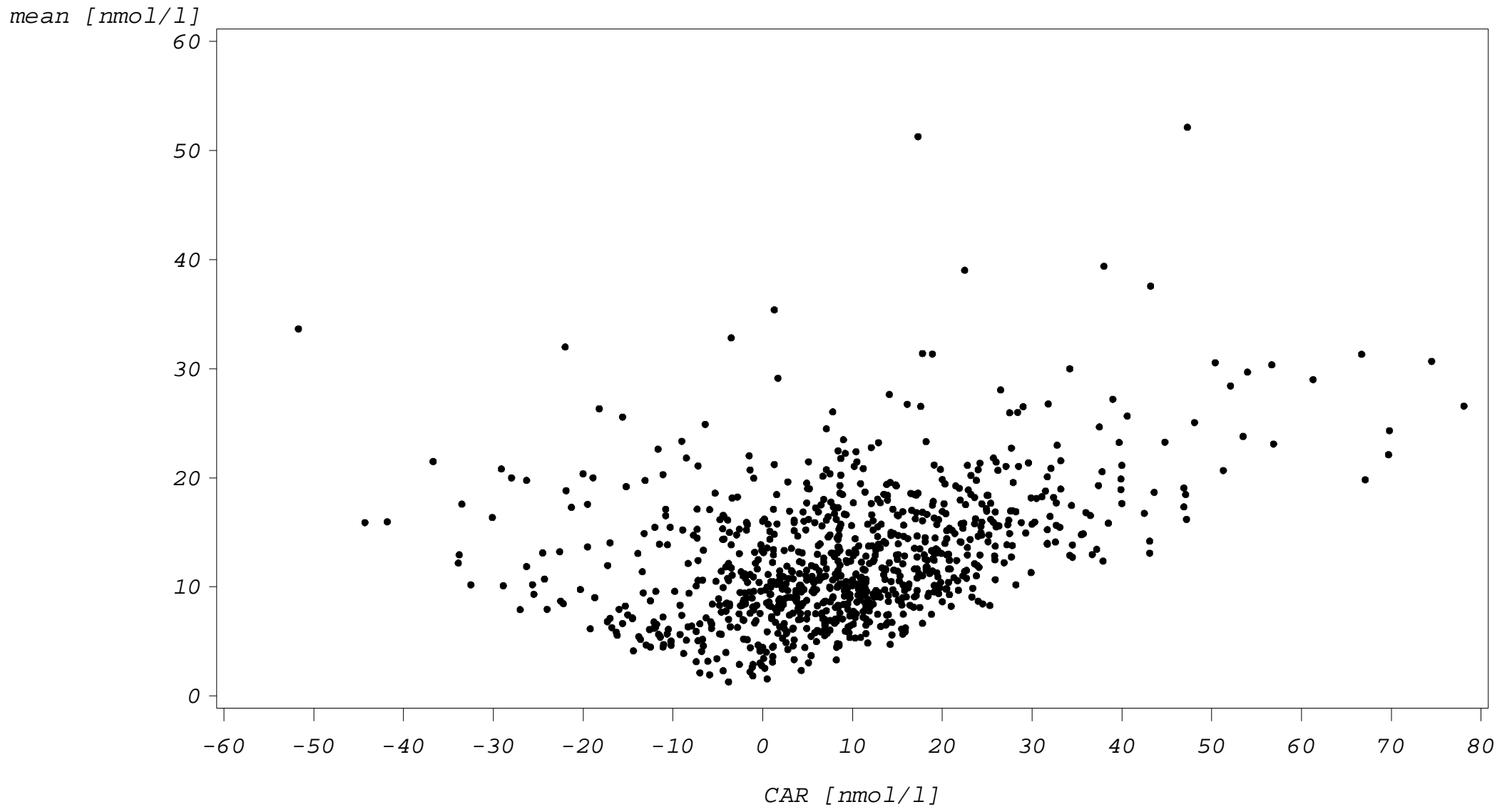
Study 2: effect of awakening cortisol levels

*cortisol levels at $t(+0)$ * AUC (excluding $t+30$)*



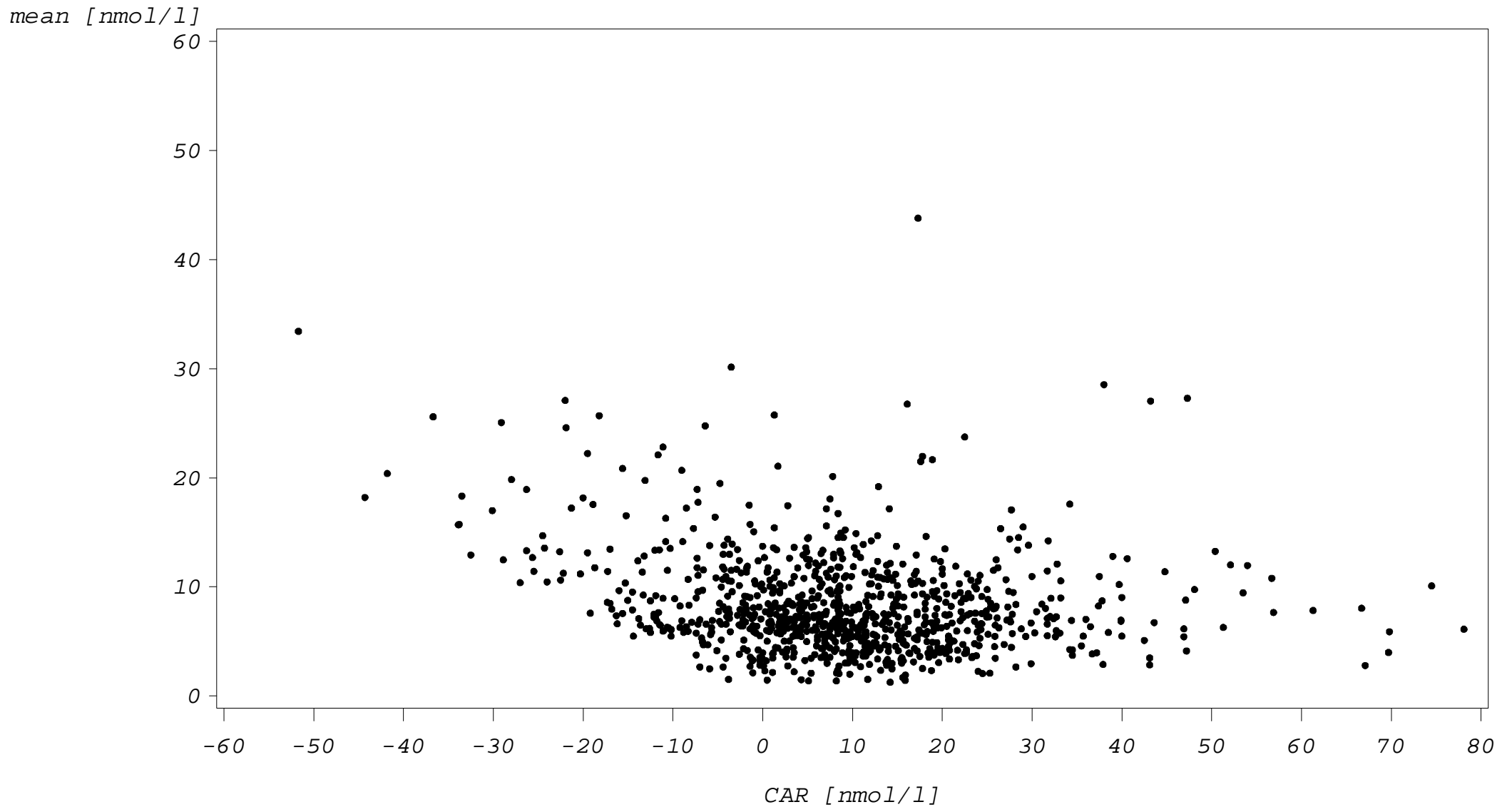
Study 2: effect of awakening cortisol levels

*cortisol awakening rise * diurnal mean (including t+30)*



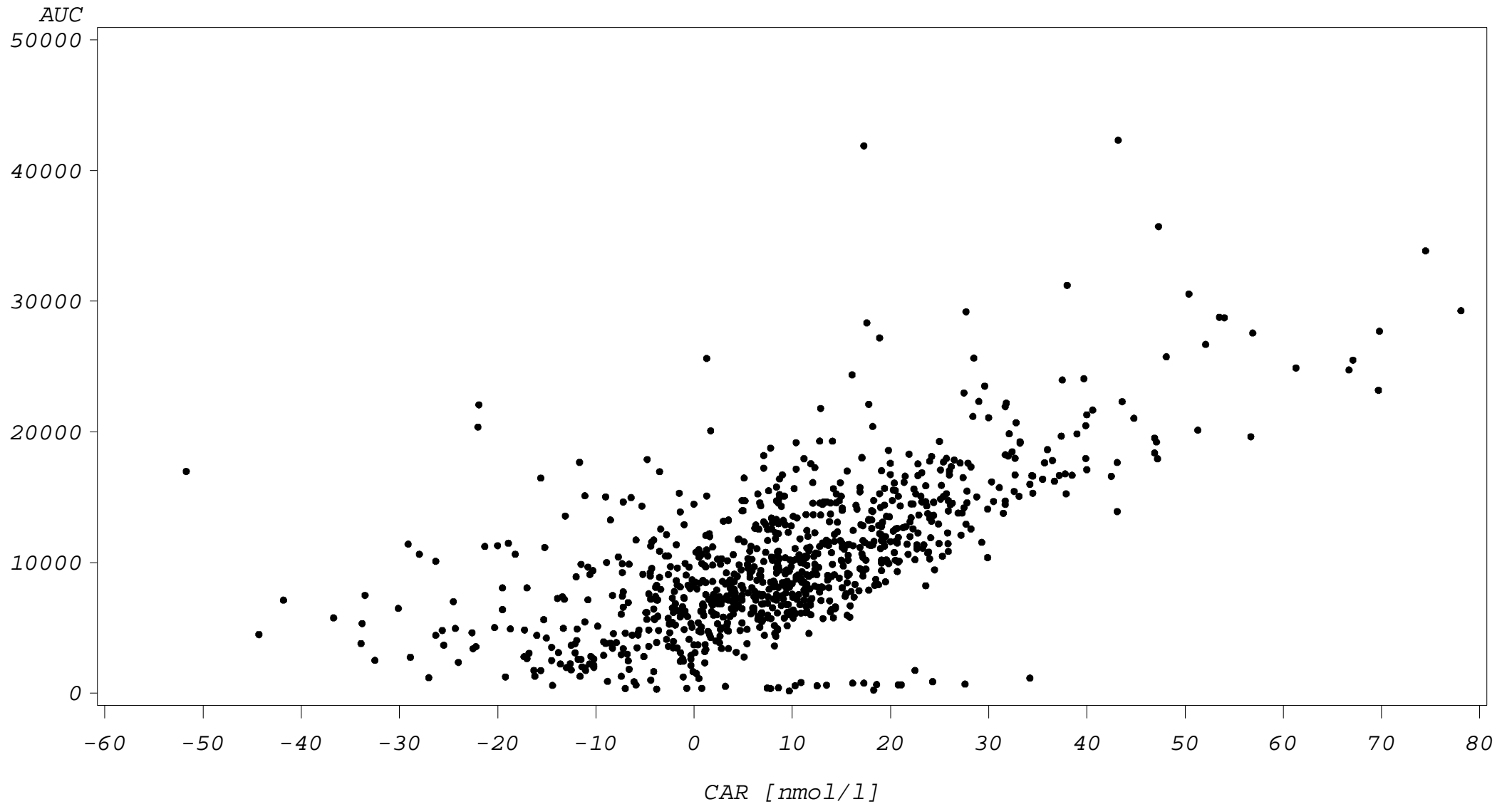
Study 2: effect of awakening cortisol levels

*cortisol awakening rise * diurnal mean (excluding t+30)*



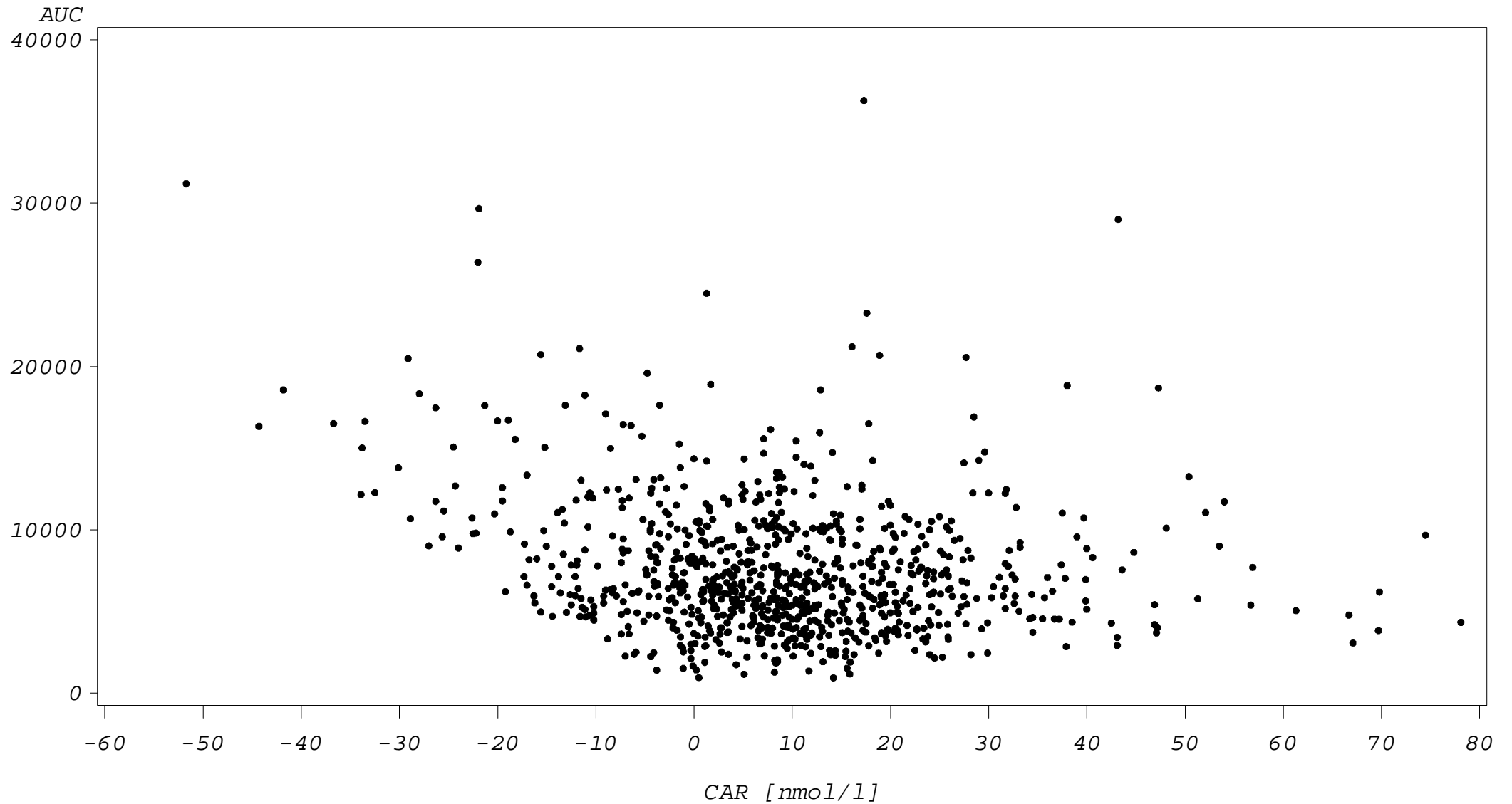
Study 2: effect of awakening cortisol levels

*cortisol awakening rise * AUC (including t+30)*



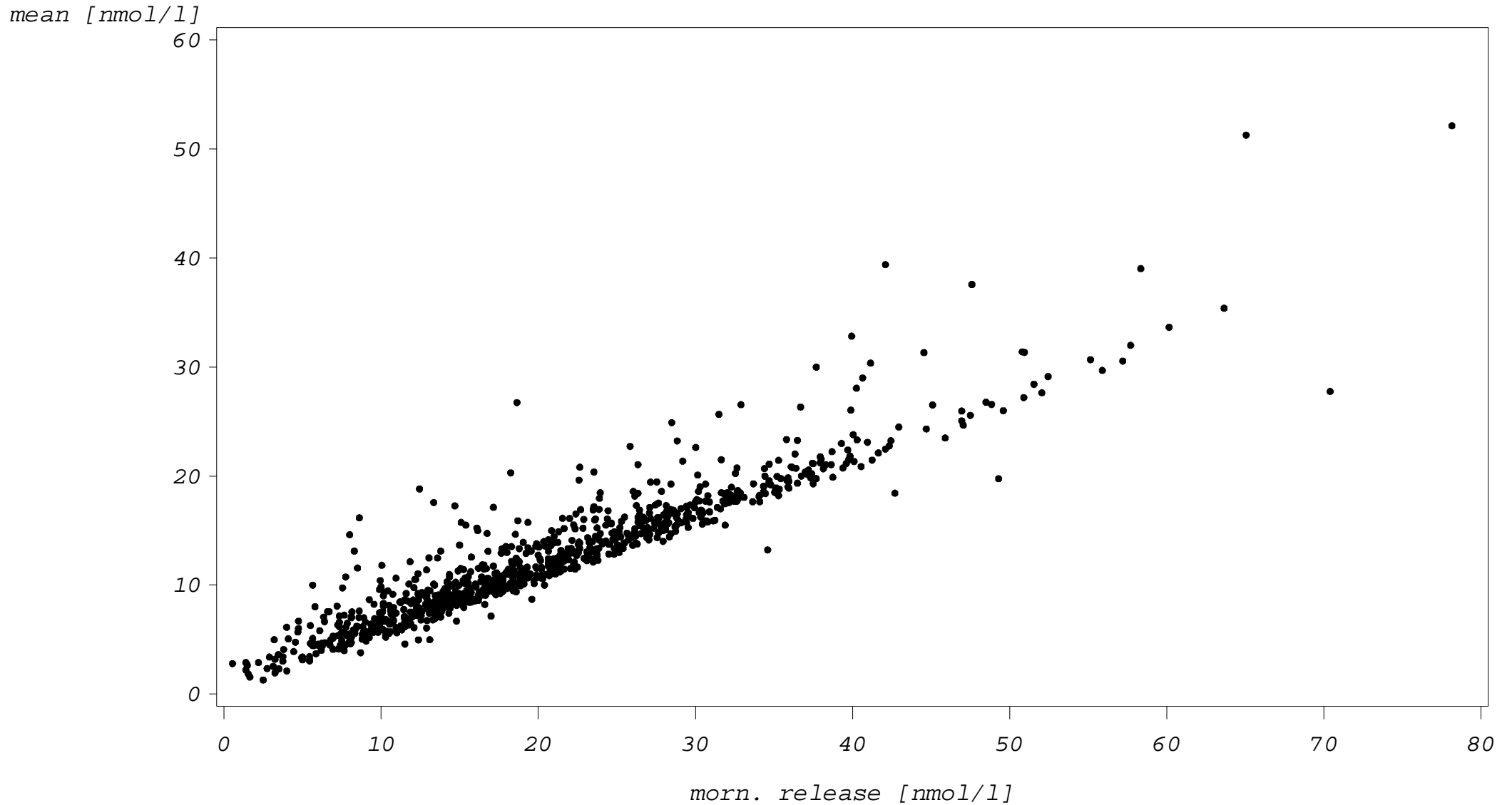
Study 2: effect of awakening cortisol levels

*cortisol awakening rise * AUC (excluding t+30)*



Study 2: effect of awakening cortisol levels

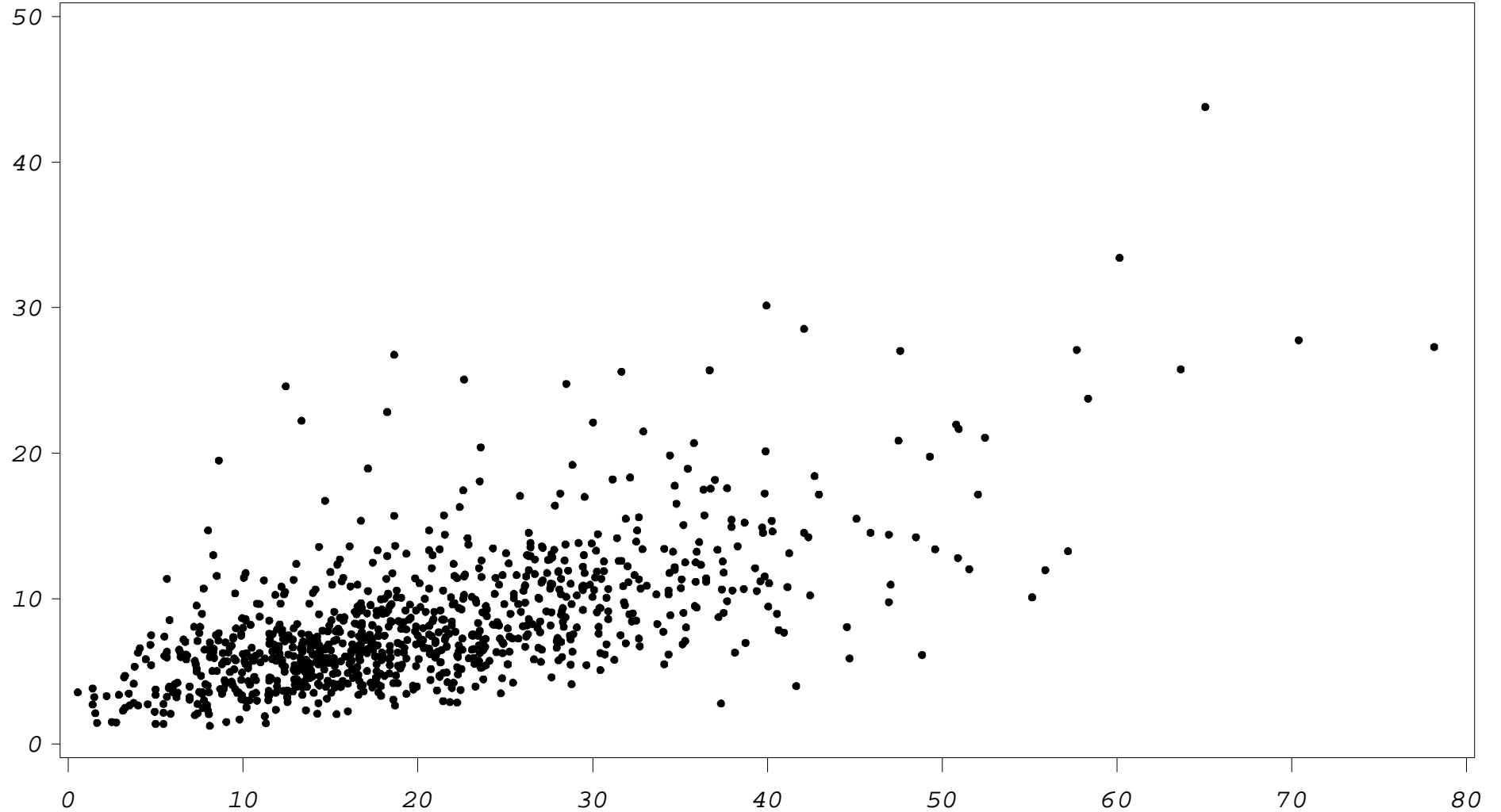
*total morning cortisol release * diurnal mean (including t+30)*



Study 2: effect of awakening cortisol levels

*total morning cortisol release * diurnal mean (excluding t+30)*

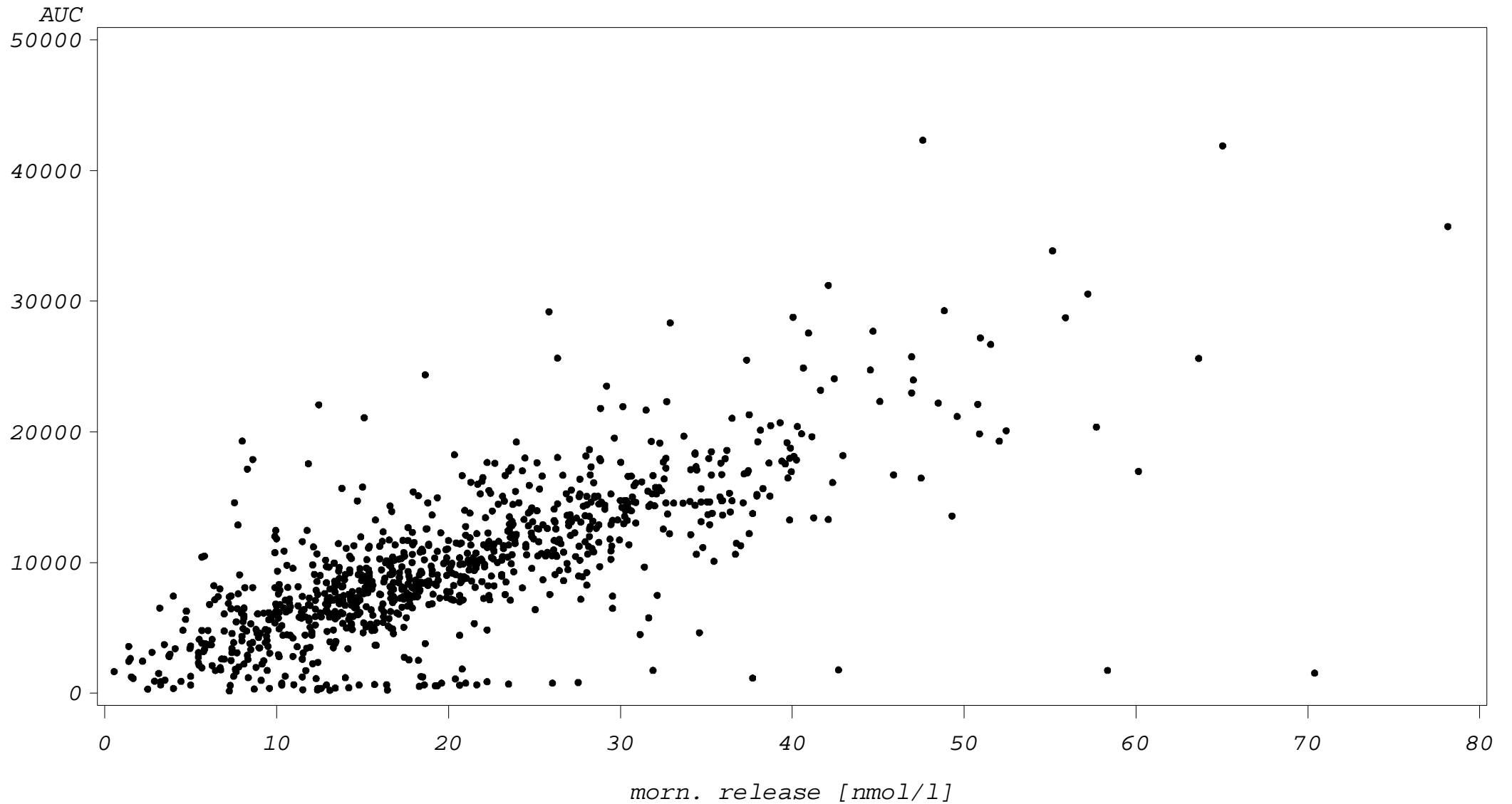
mean [nmol/l]



morn. release [nmol/l]

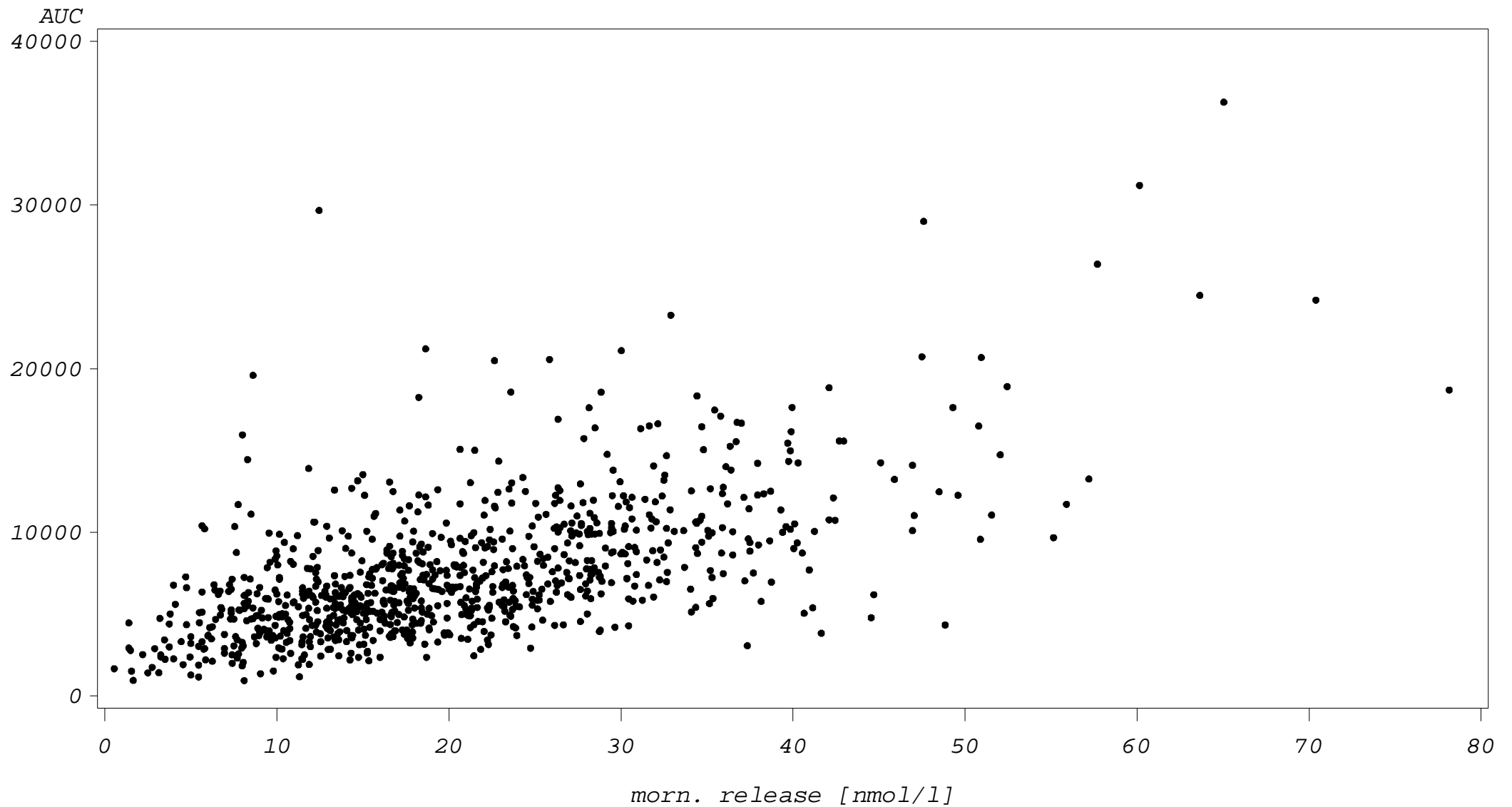
Study 2: effect of awakening cortisol levels

*total morning cortisol release * AUC (including t+30)*



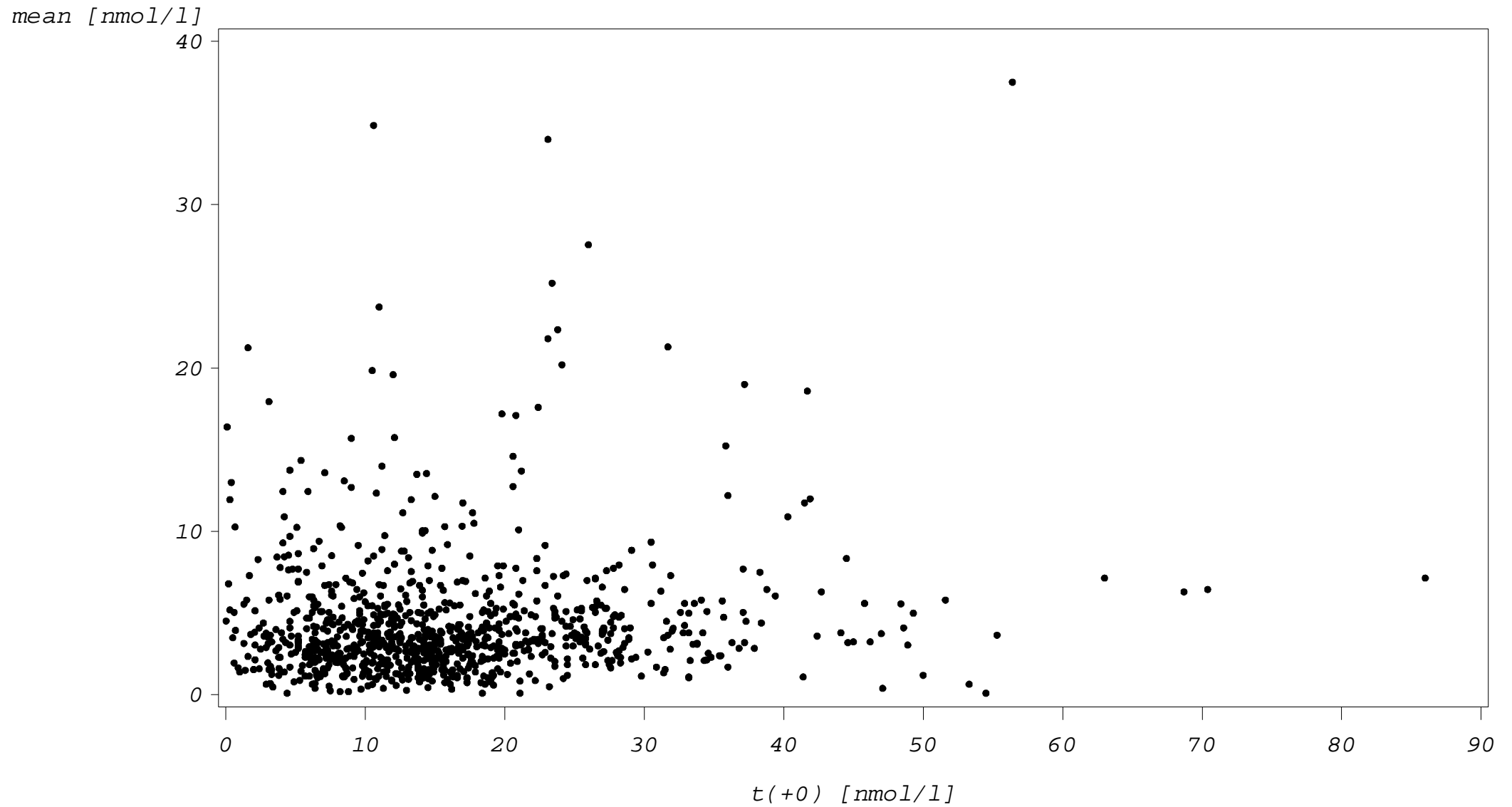
Study 2: effect of awakening cortisol levels

*total morning cortisol release * AUC (excluding t+30)*



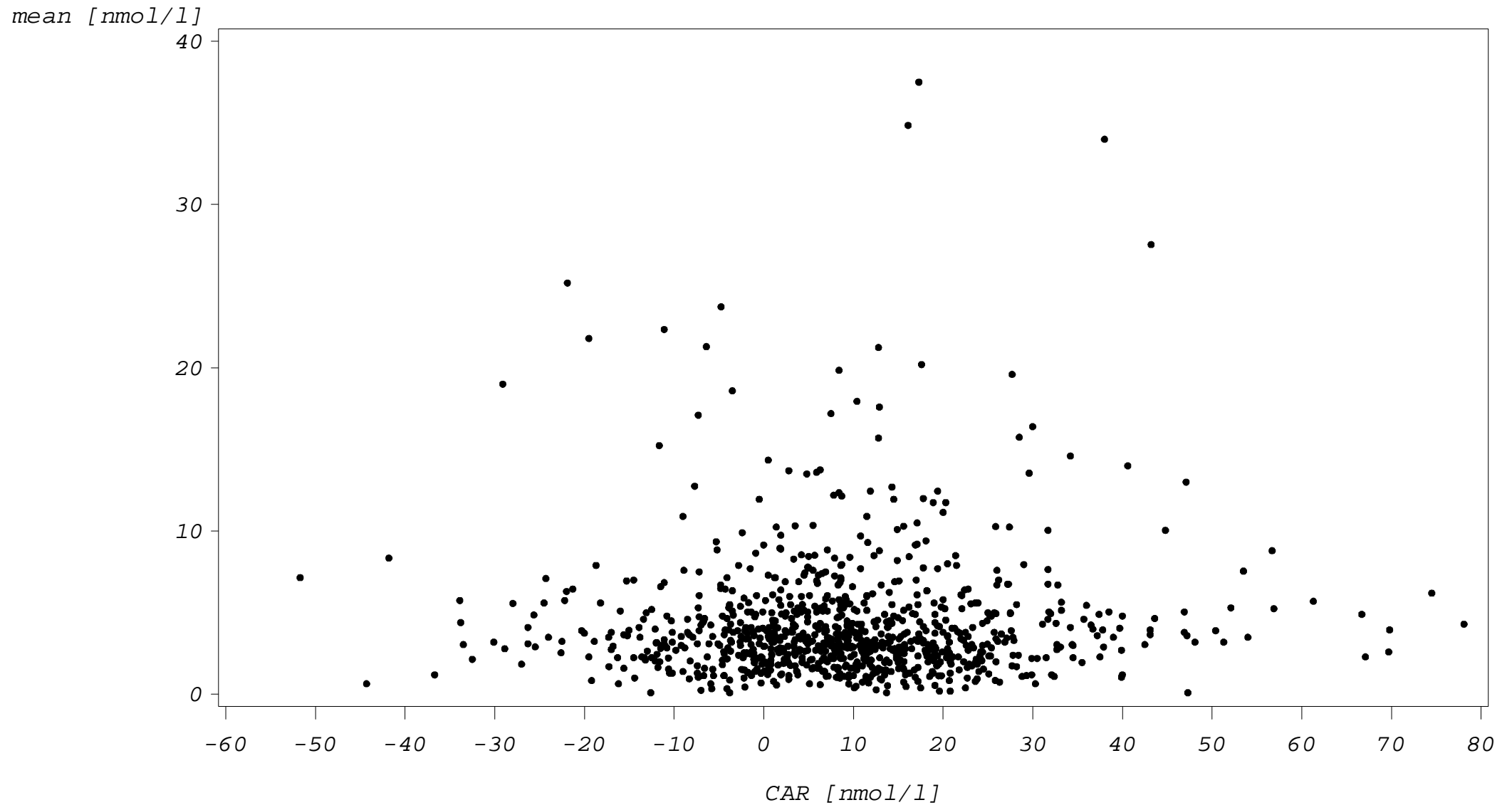
Study 2: effect of awakening cortisol levels

*cortisol levels at $t(+0)$ * diurnal mean (16:00-20:00)*



Study 2: effect of awakening cortisol levels

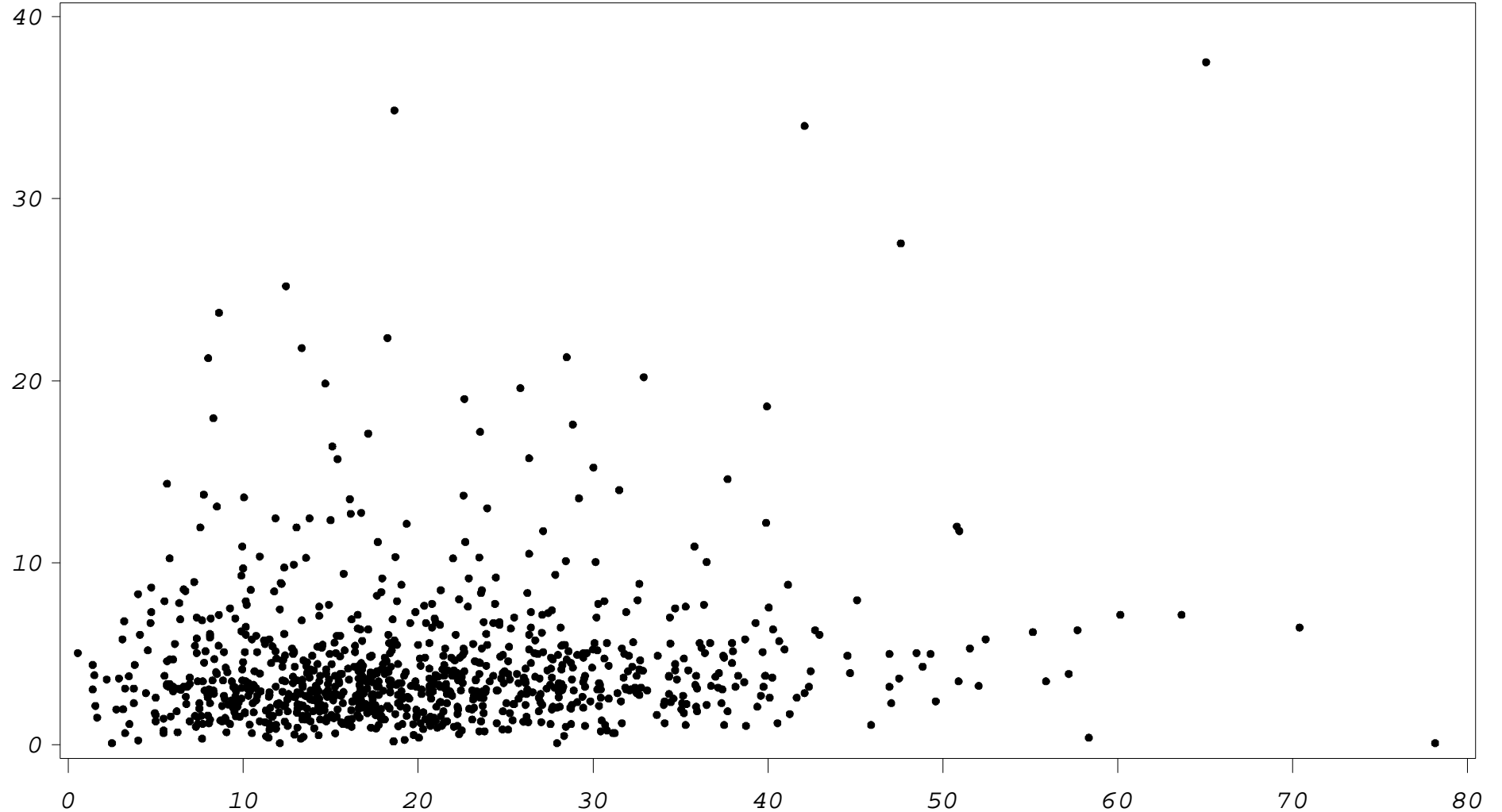
*cortisol awakening rise * diurnal mean (16:00-2000)*



Study 2: effect of awakening cortisol levels

*total morning cortisol release * diurnal mean (16:00-2000)*

mean [nmol/l]

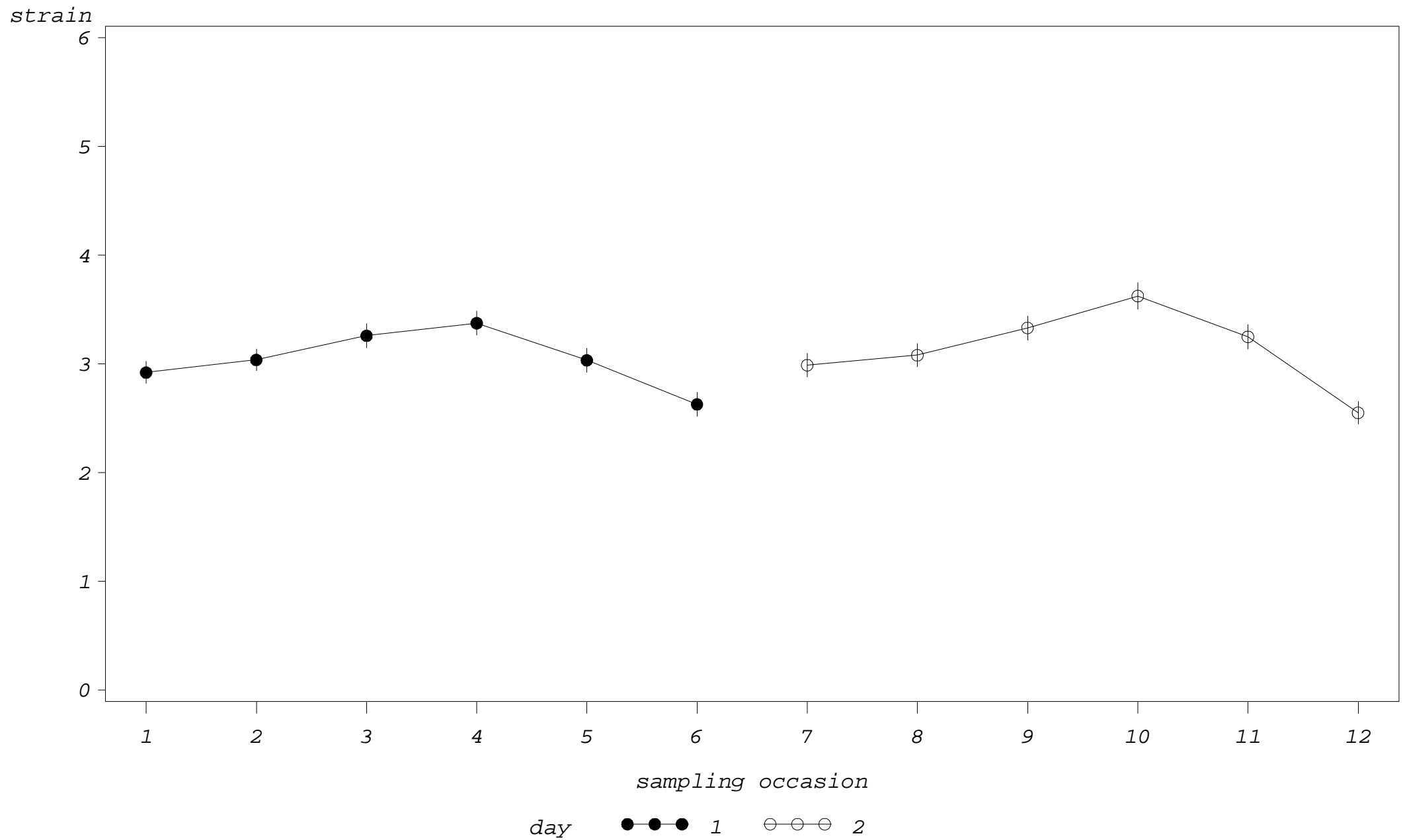


morn. release [nmol/l]

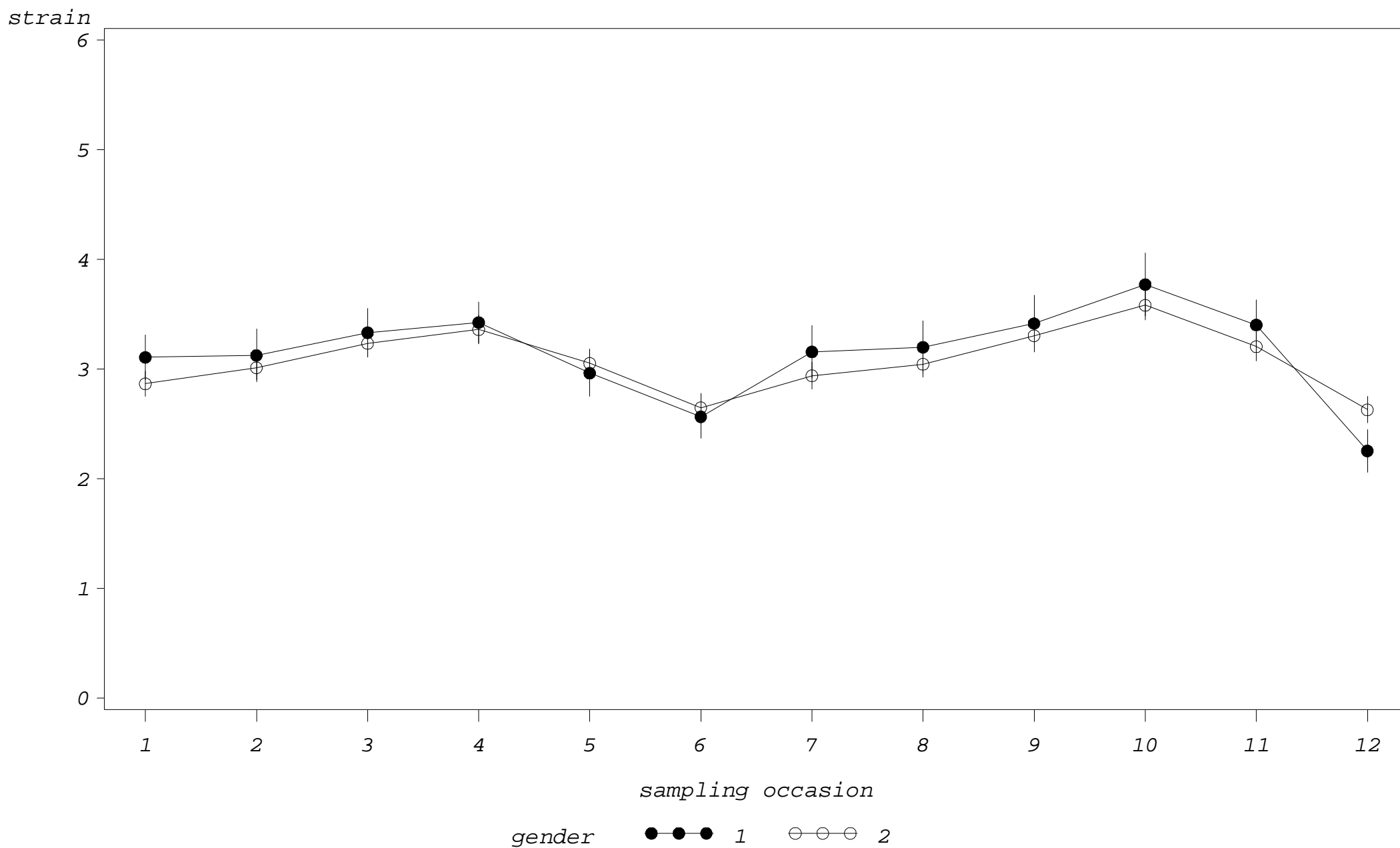
Appendix 4.1

Diurnal Profiles of Mood and Strain

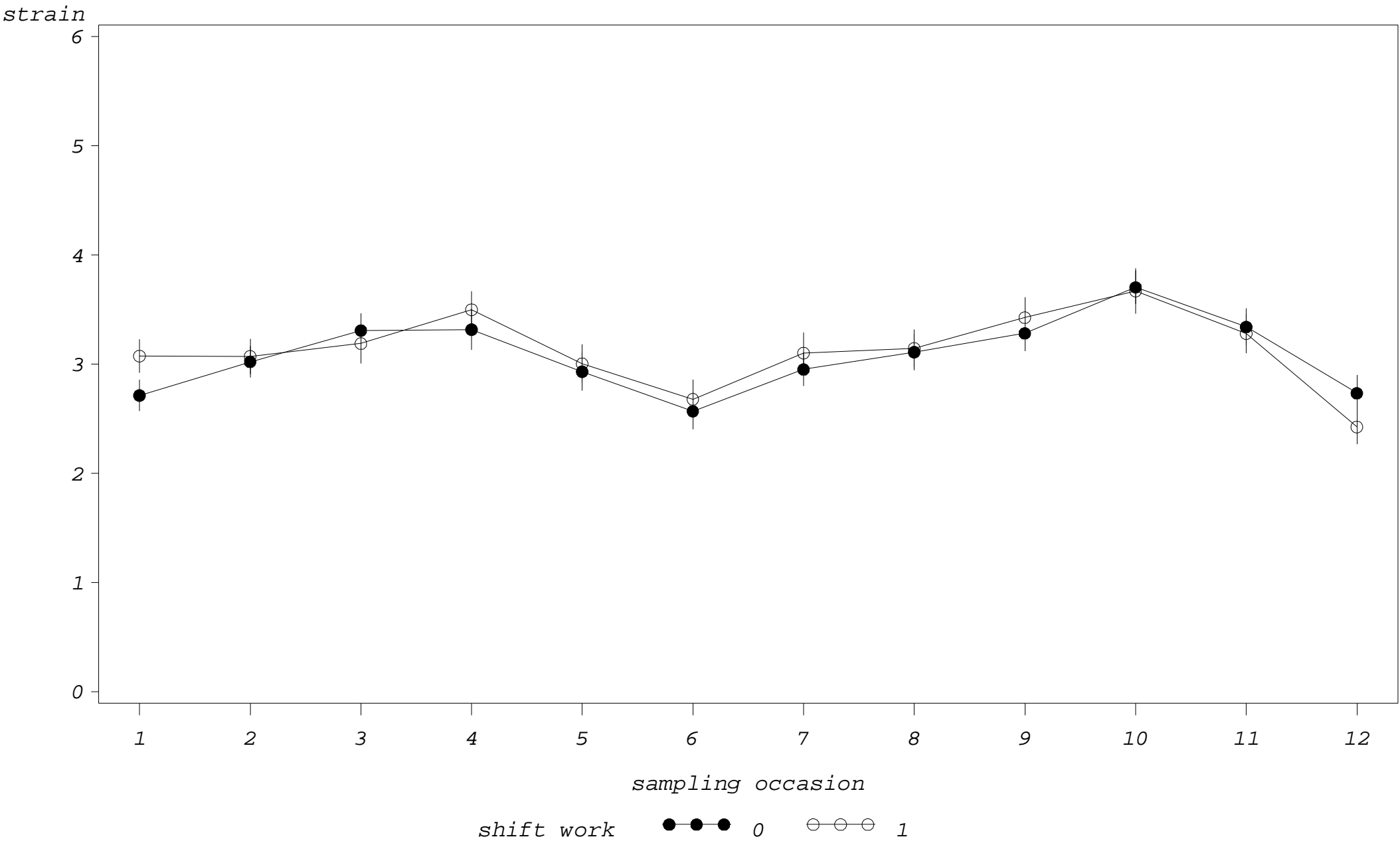
Study 1: diurnal profiles of strain (entire sample)



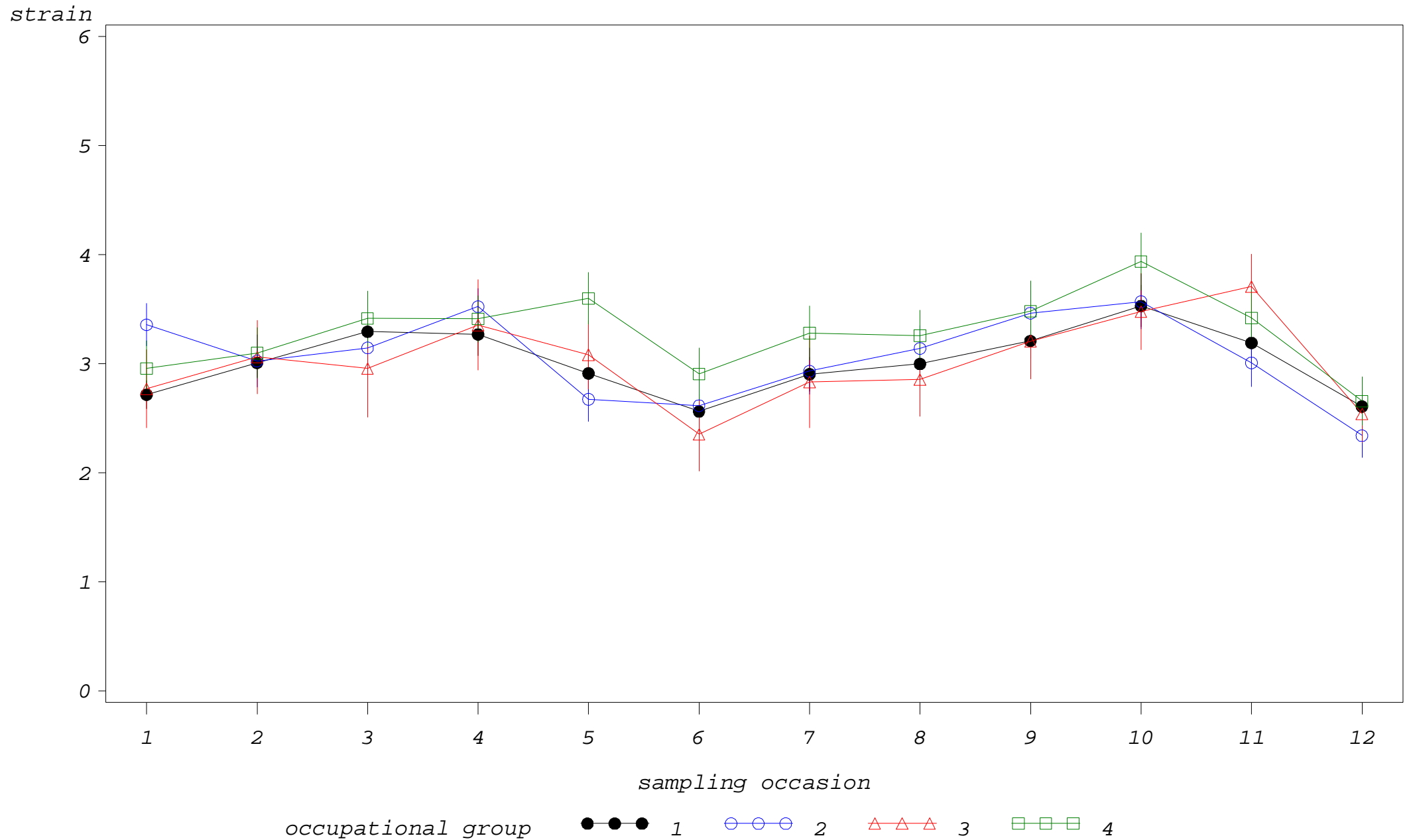
Study 1: diurnal profiles of strain by gender



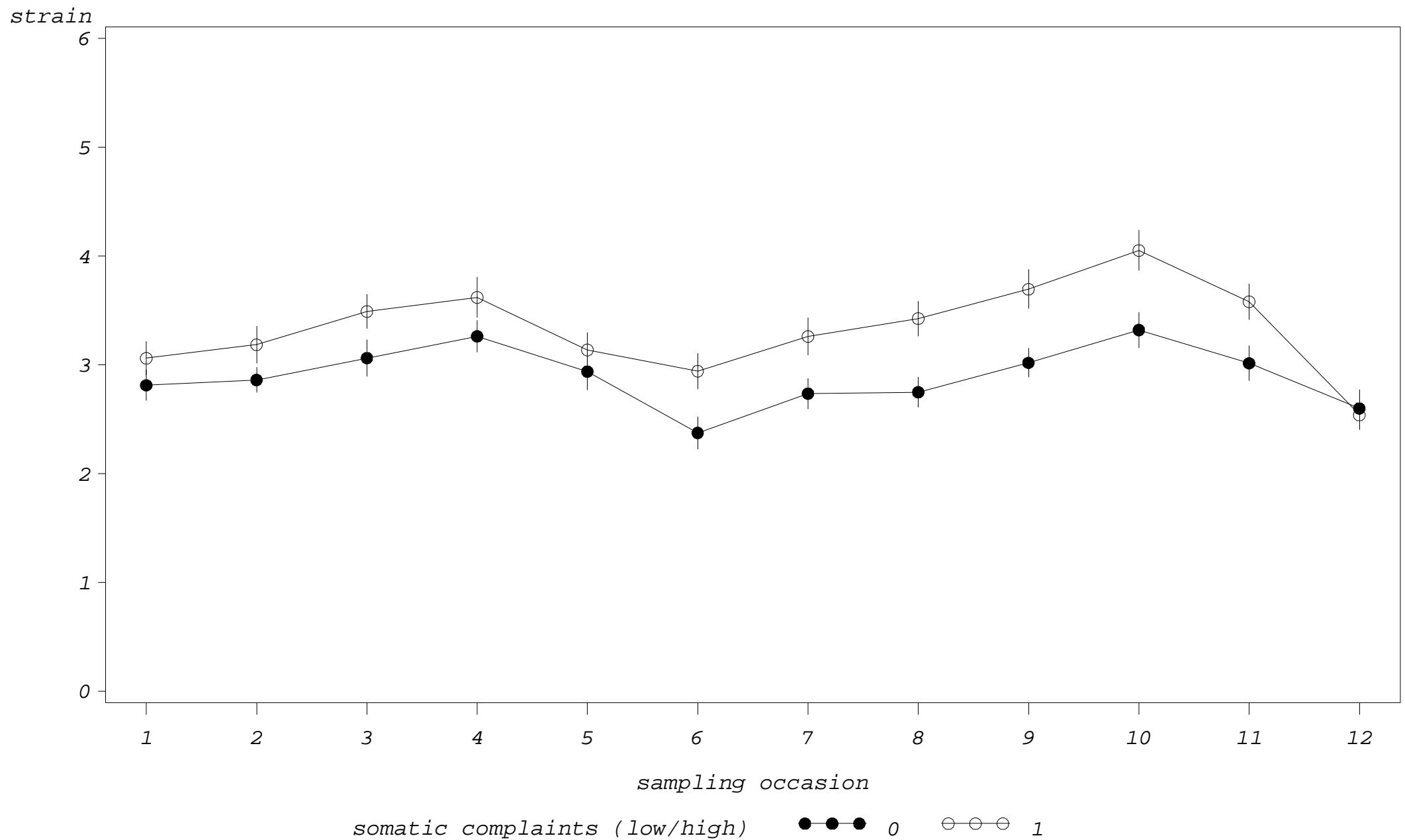
Study 1: diurnal profiles of strain by shift work



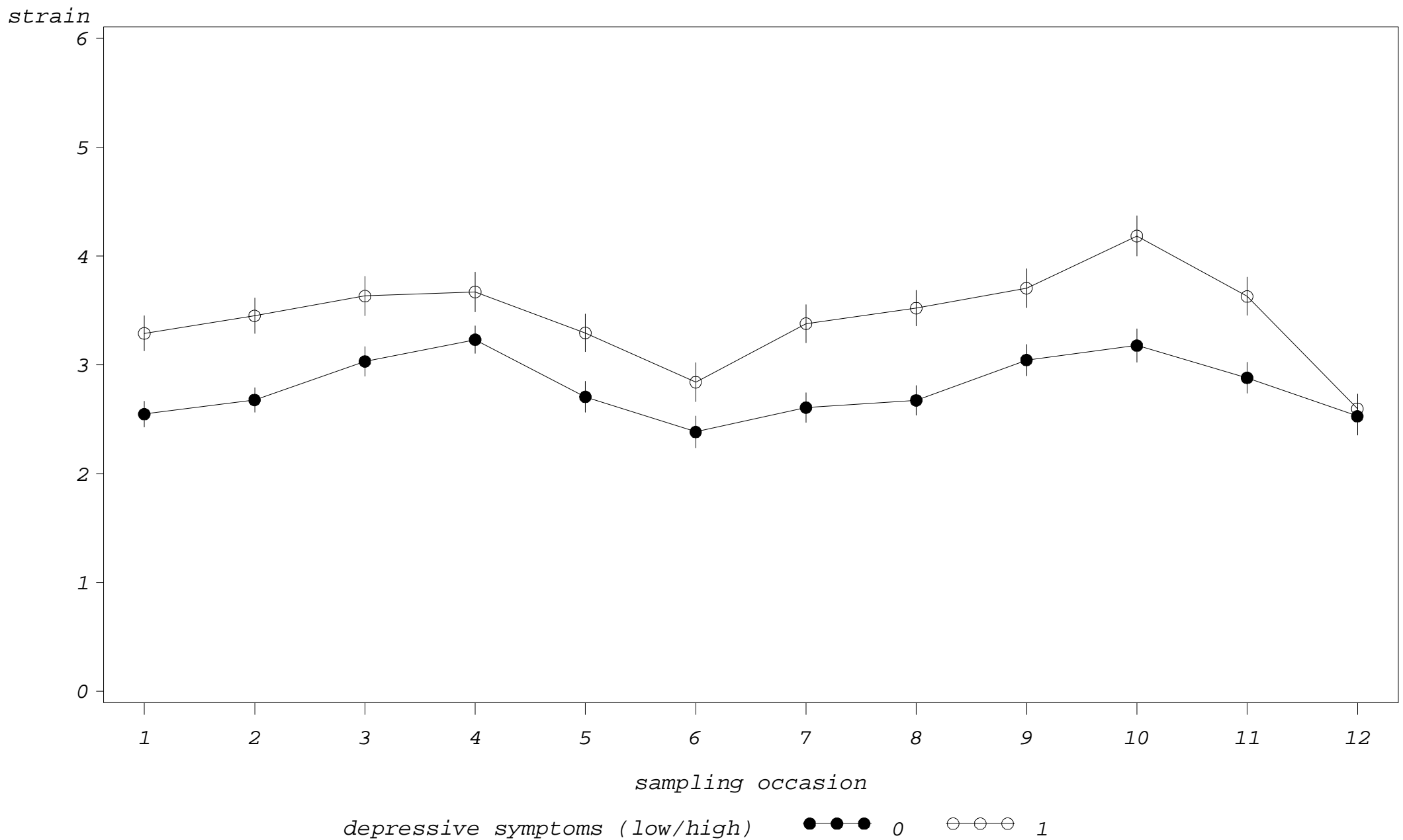
Study 1: diurnal profiles of strain by occupational group



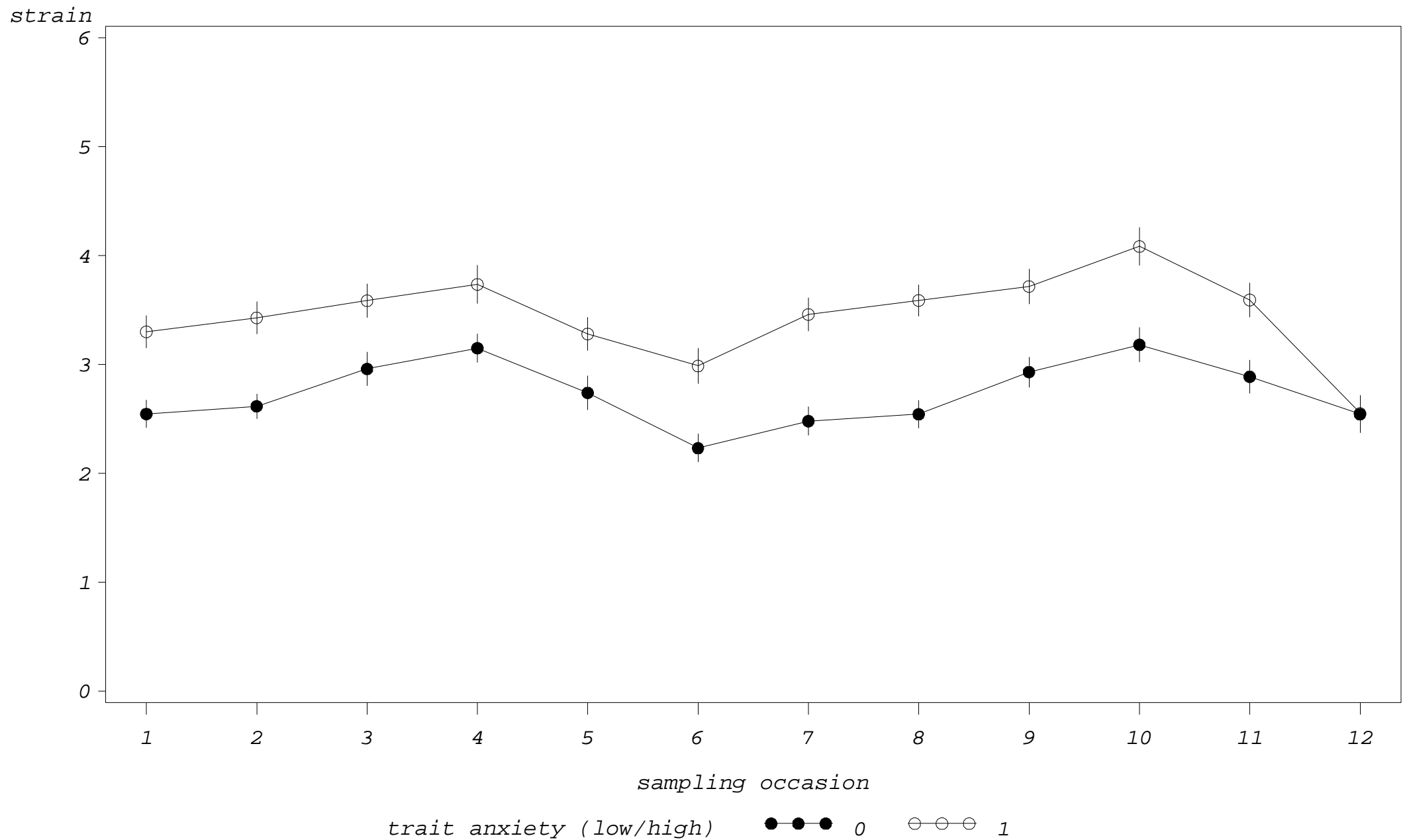
Study 1: diurnal profiles of strain by somatic complaints



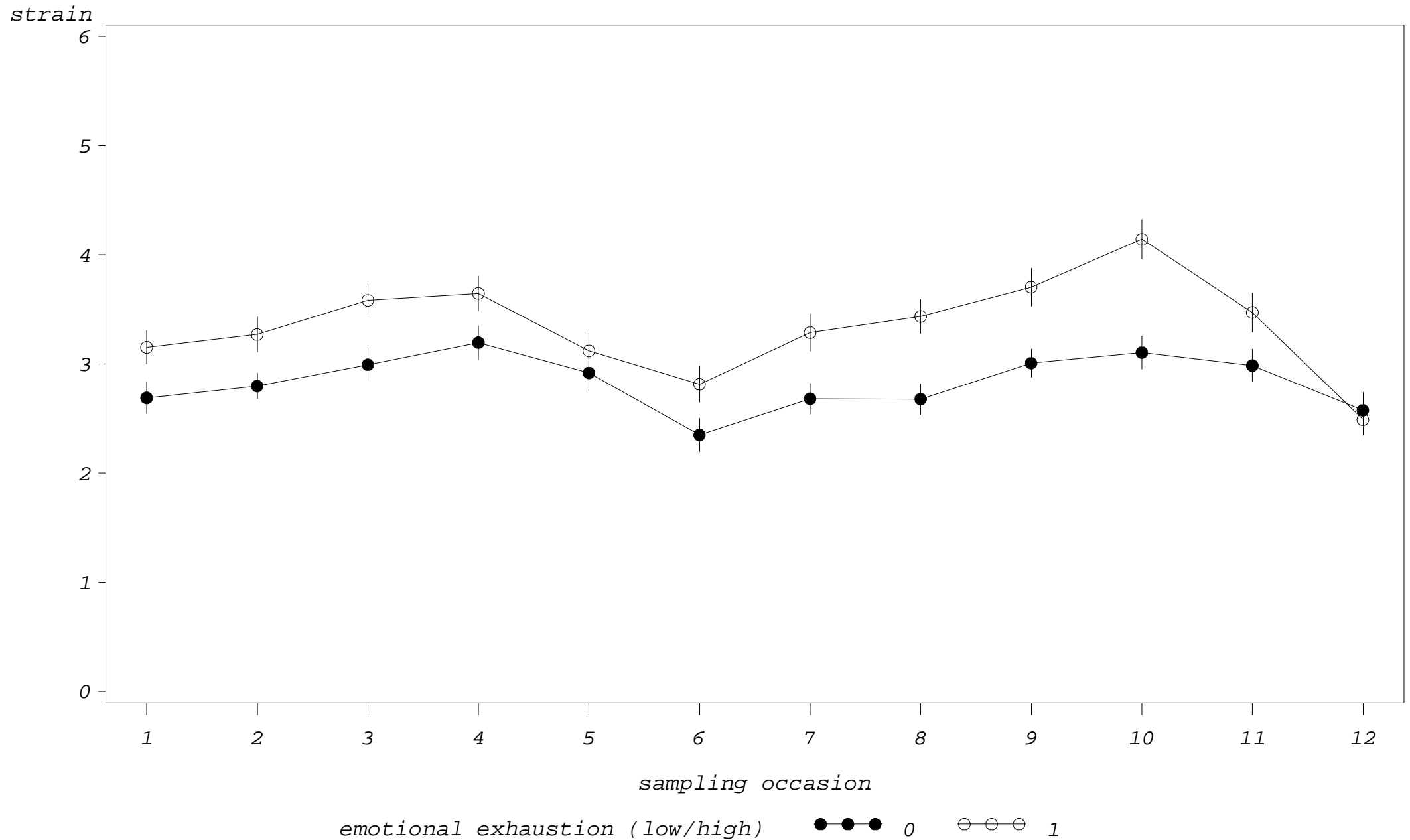
Study 1: diurnal profiles of strain by depressive symptoms



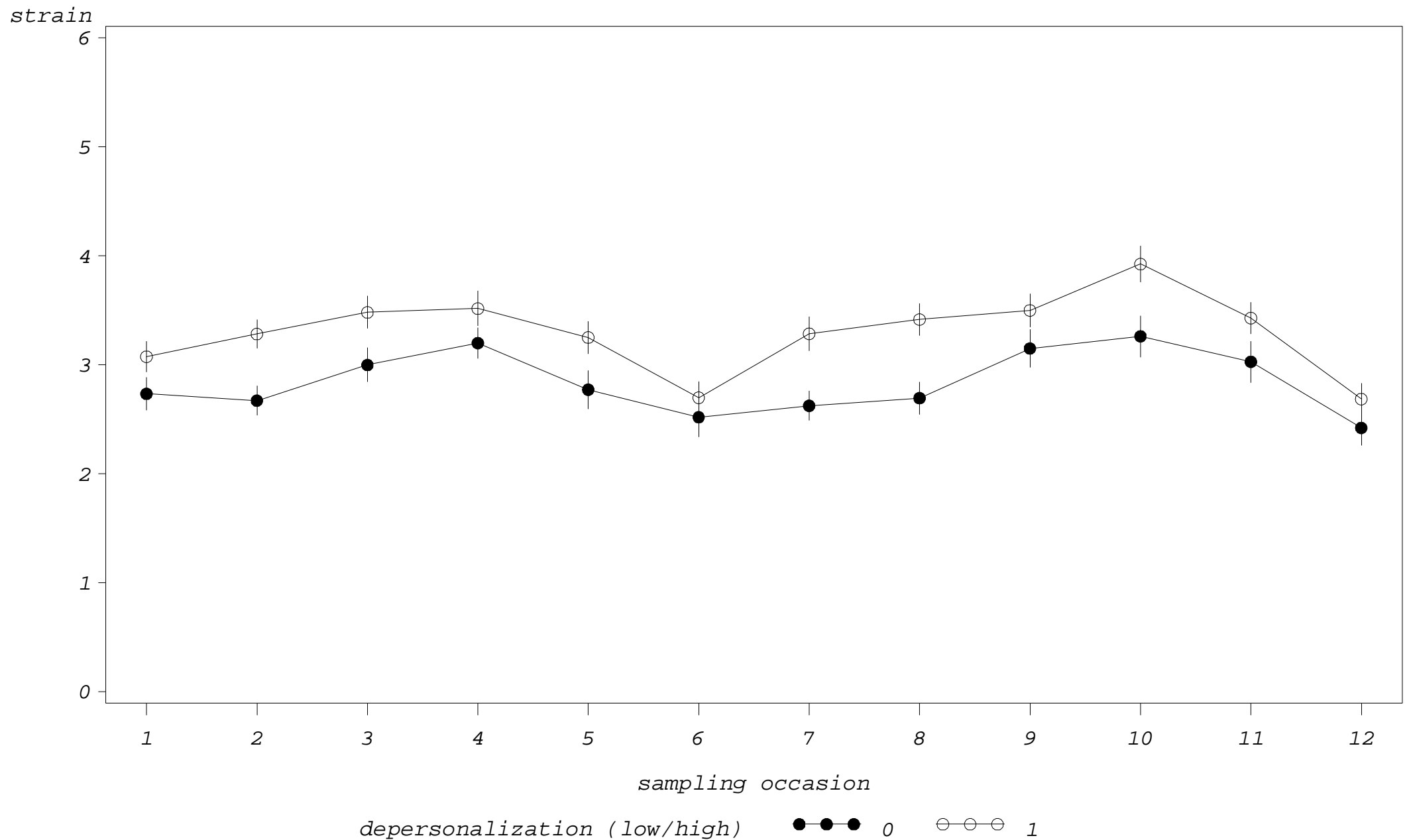
Study 1: diurnal profiles of strain by trait anxiety



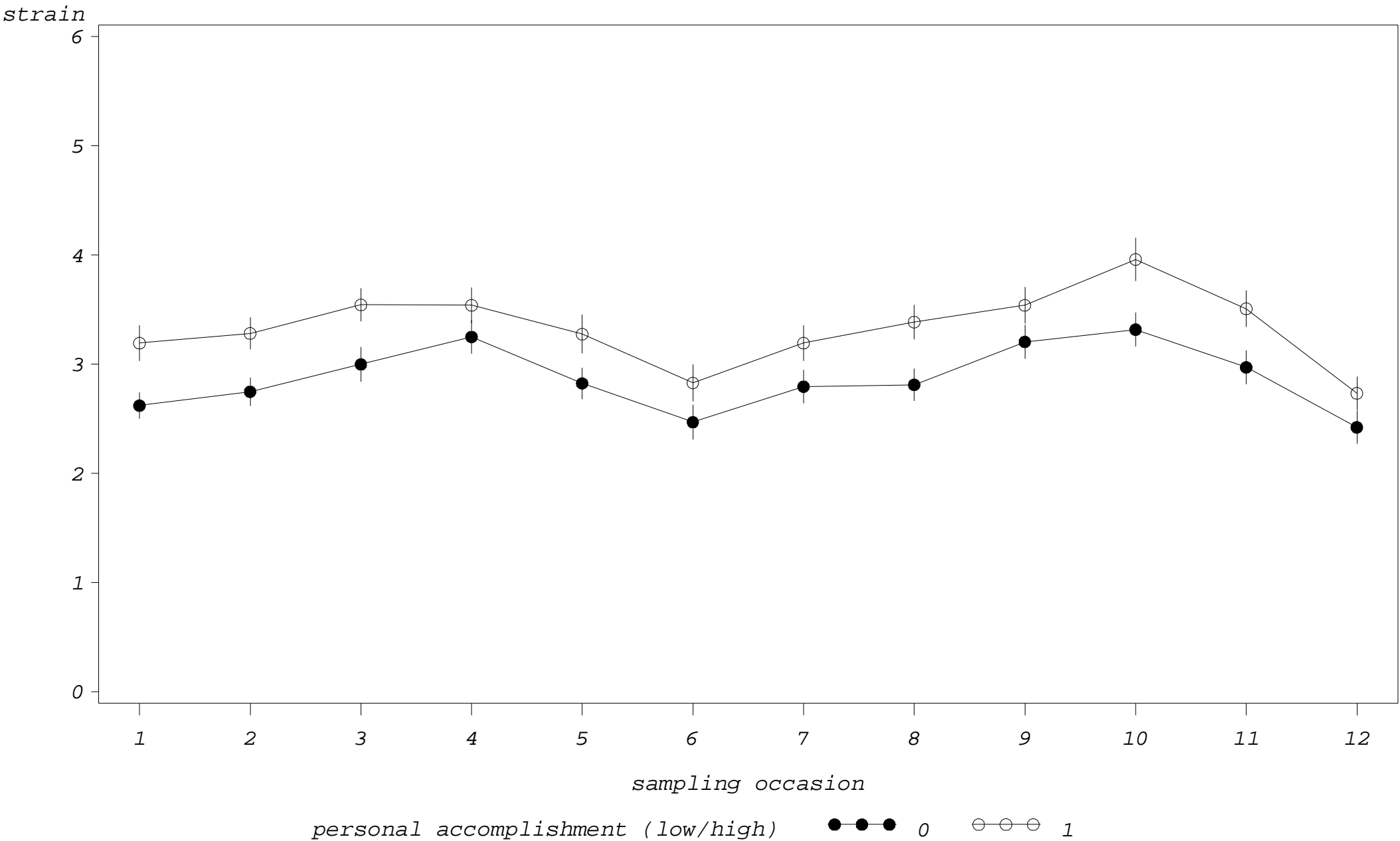
Study 1: diurnal profiles of strain by emotional exhaustion



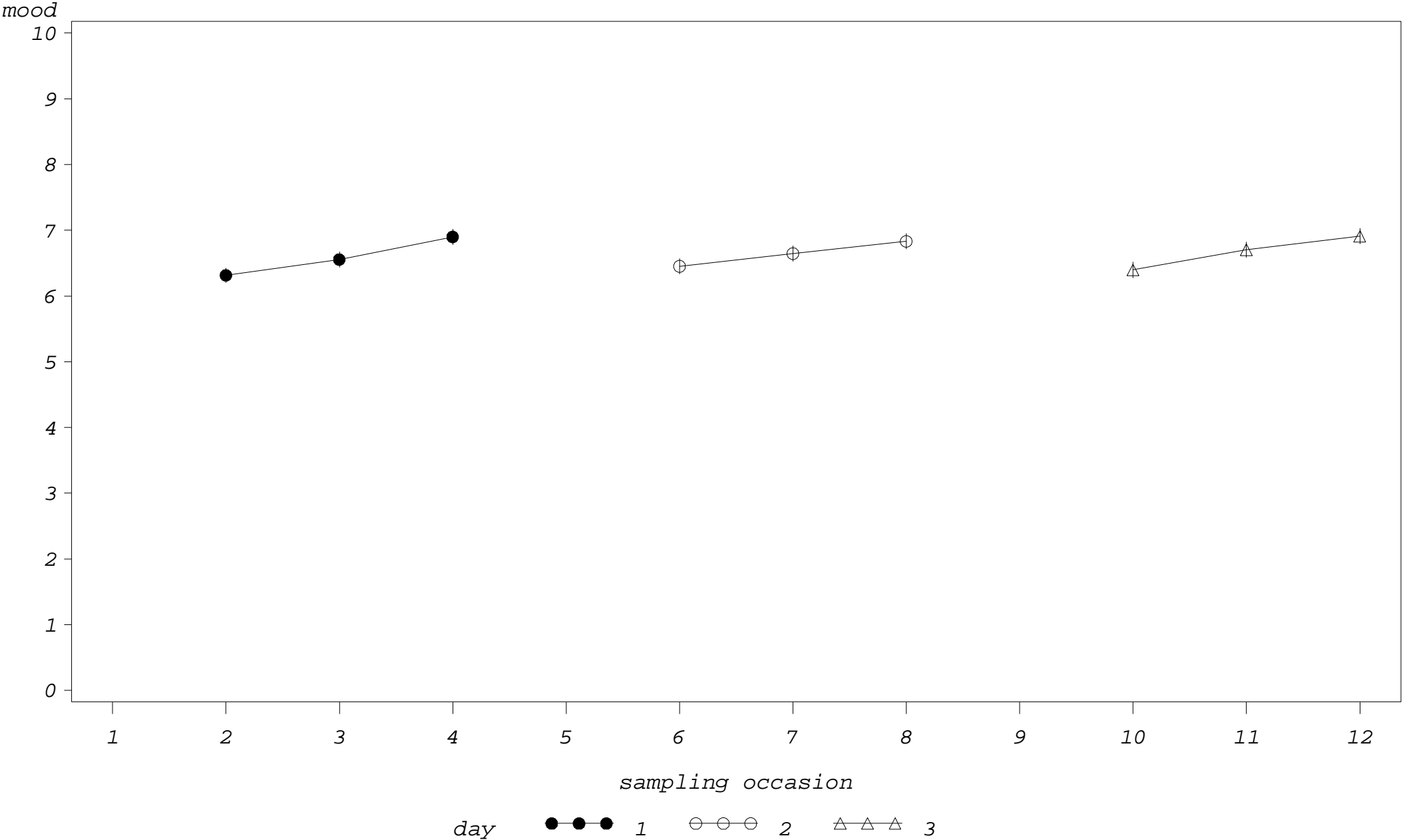
Study 1: diurnal profiles of strain by depersonalization



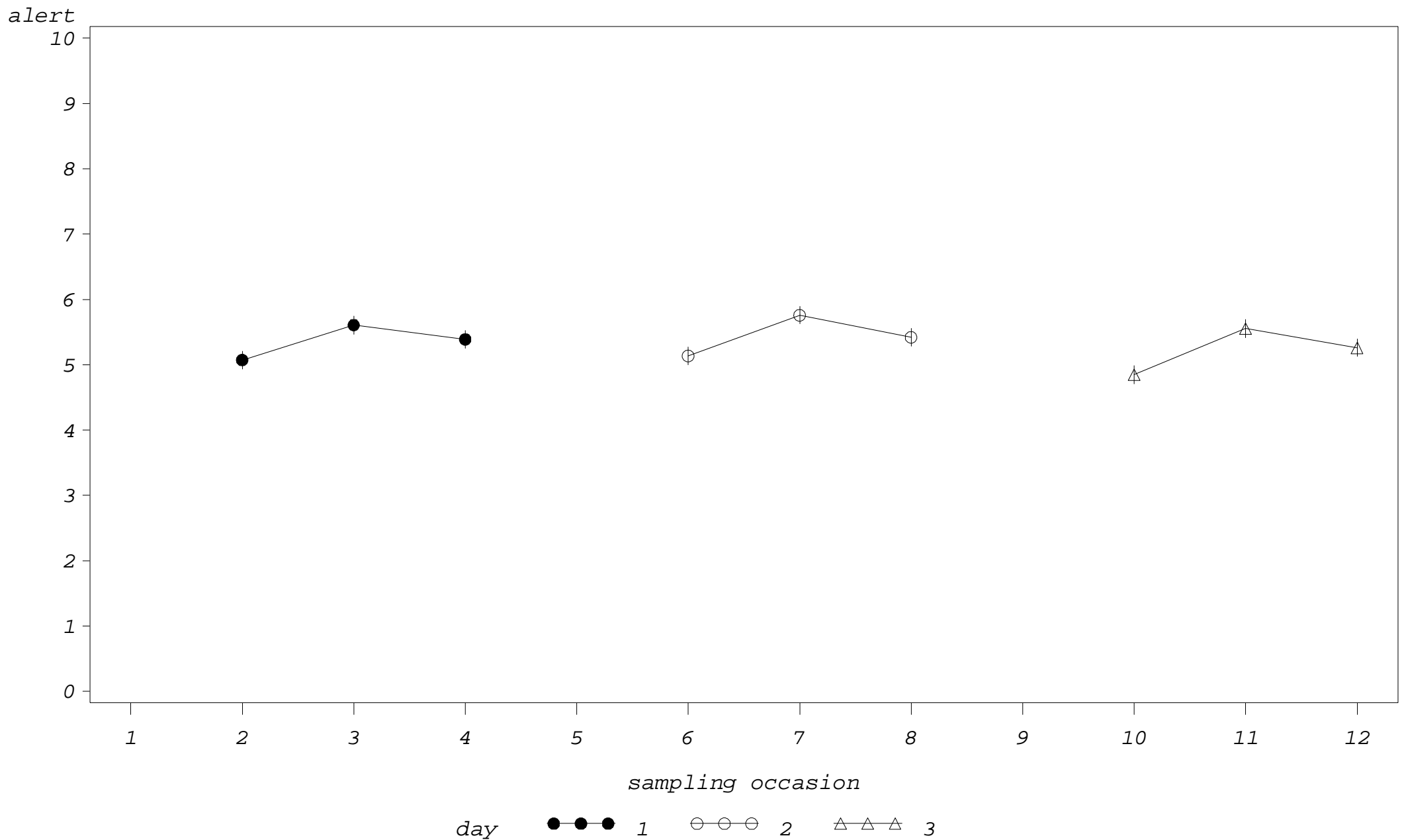
Study 1: diurnal profiles of strain by personal accomplishment



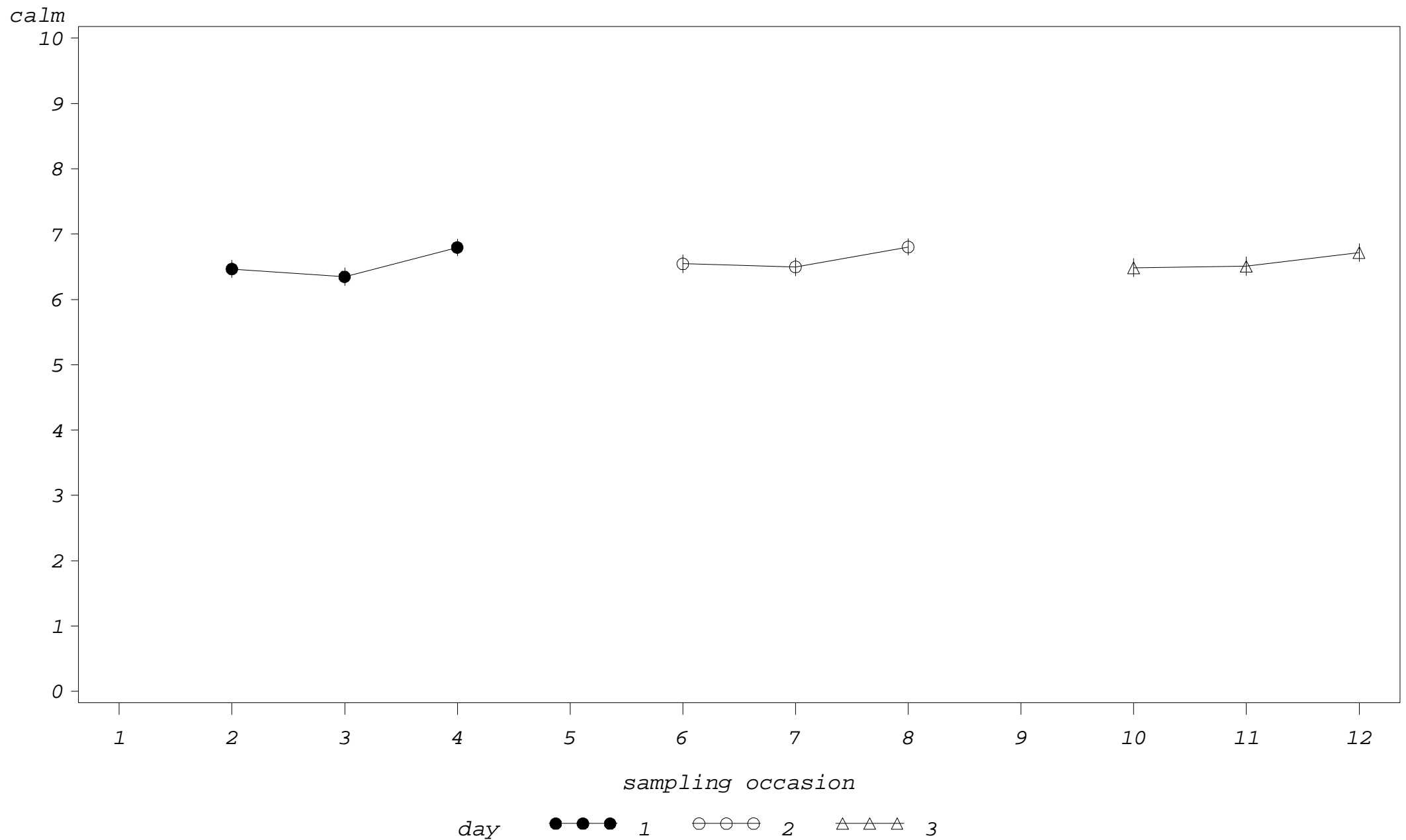
Study 2: diurnal profiles of mood (entire sample)



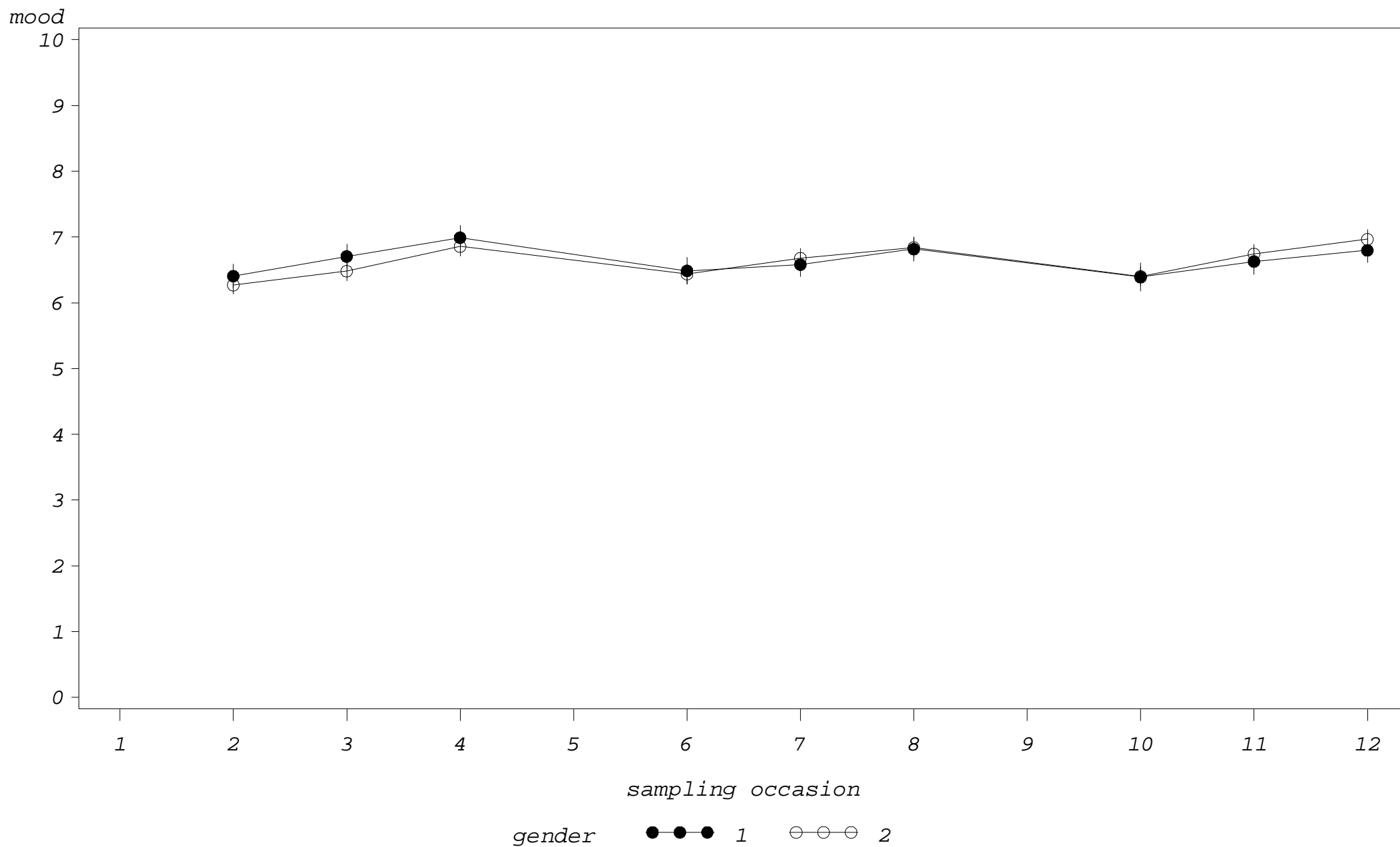
Study 2: diurnal profiles of alertness (entire sample)



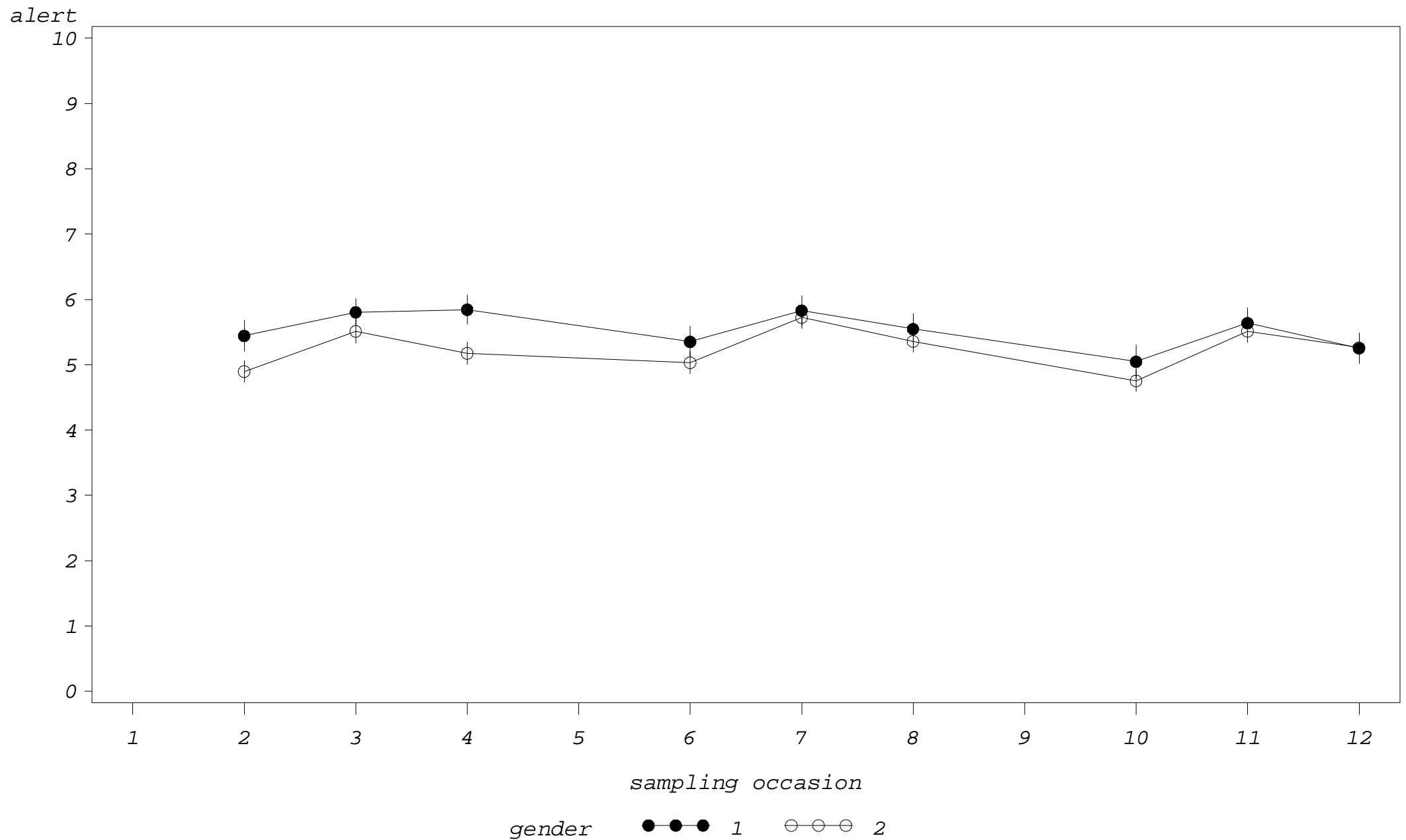
Study 2: diurnal profiles of calmness (entire sample)



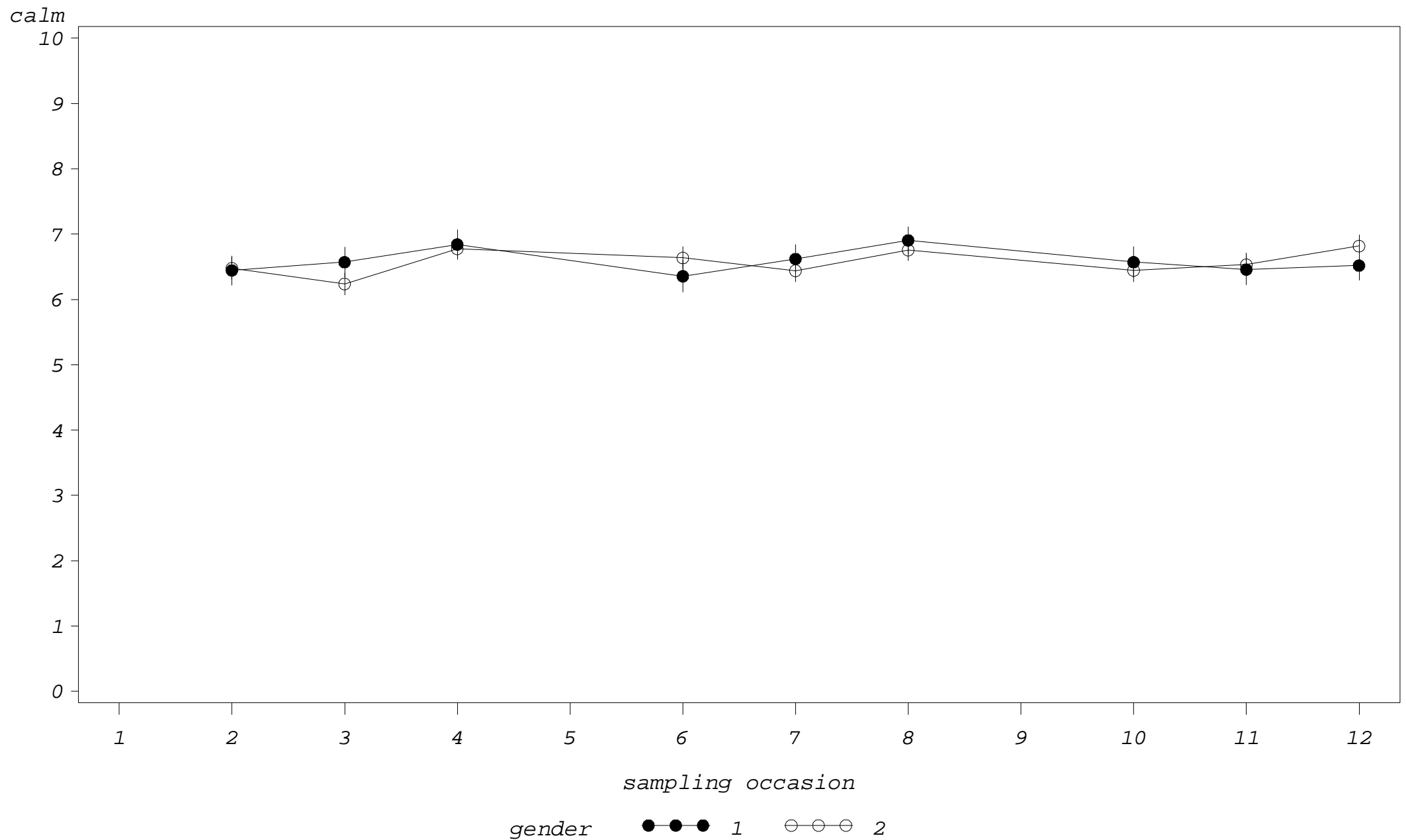
Study 2: diurnal profiles of mood by gender



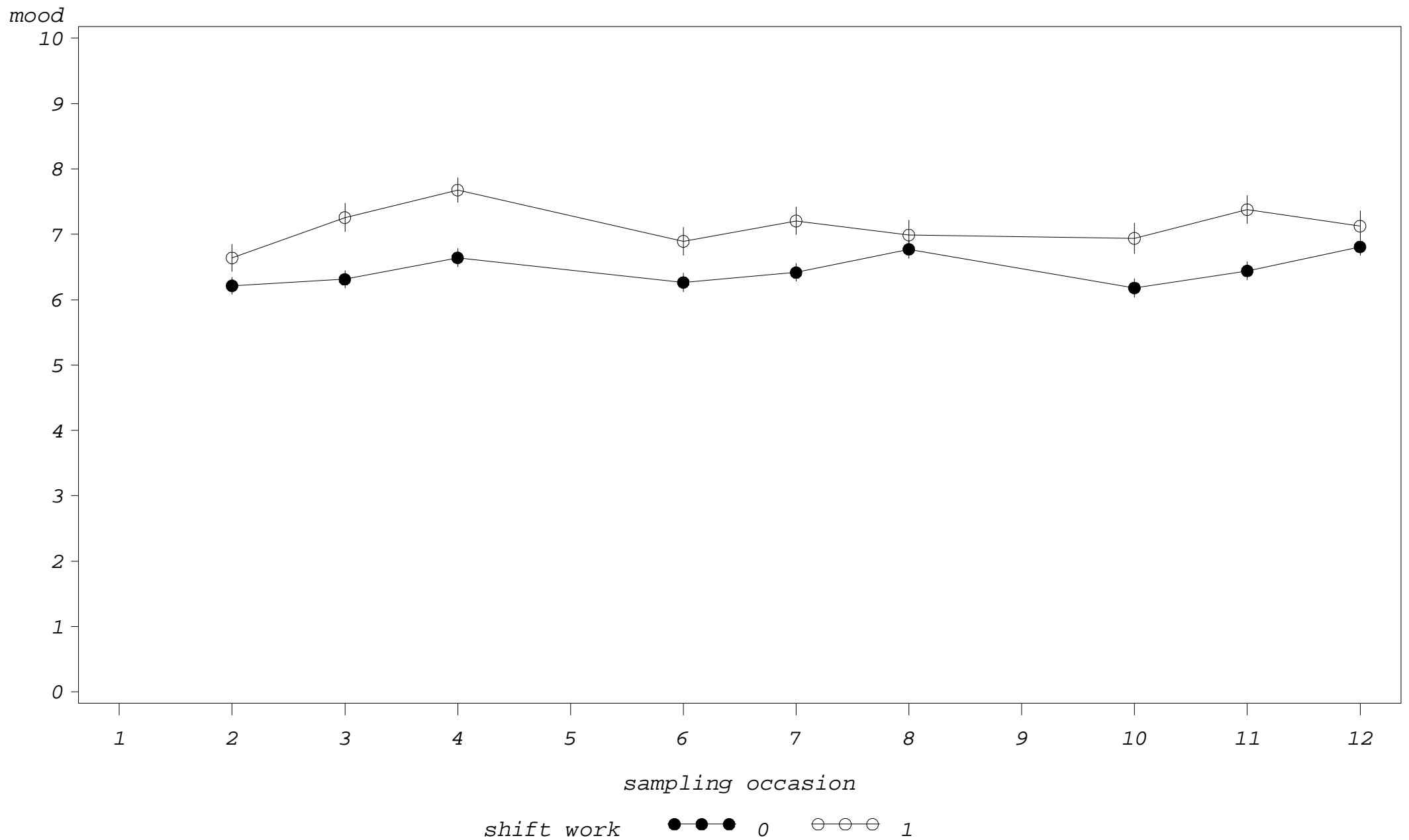
Study 2: diurnal profiles of alertness by gender



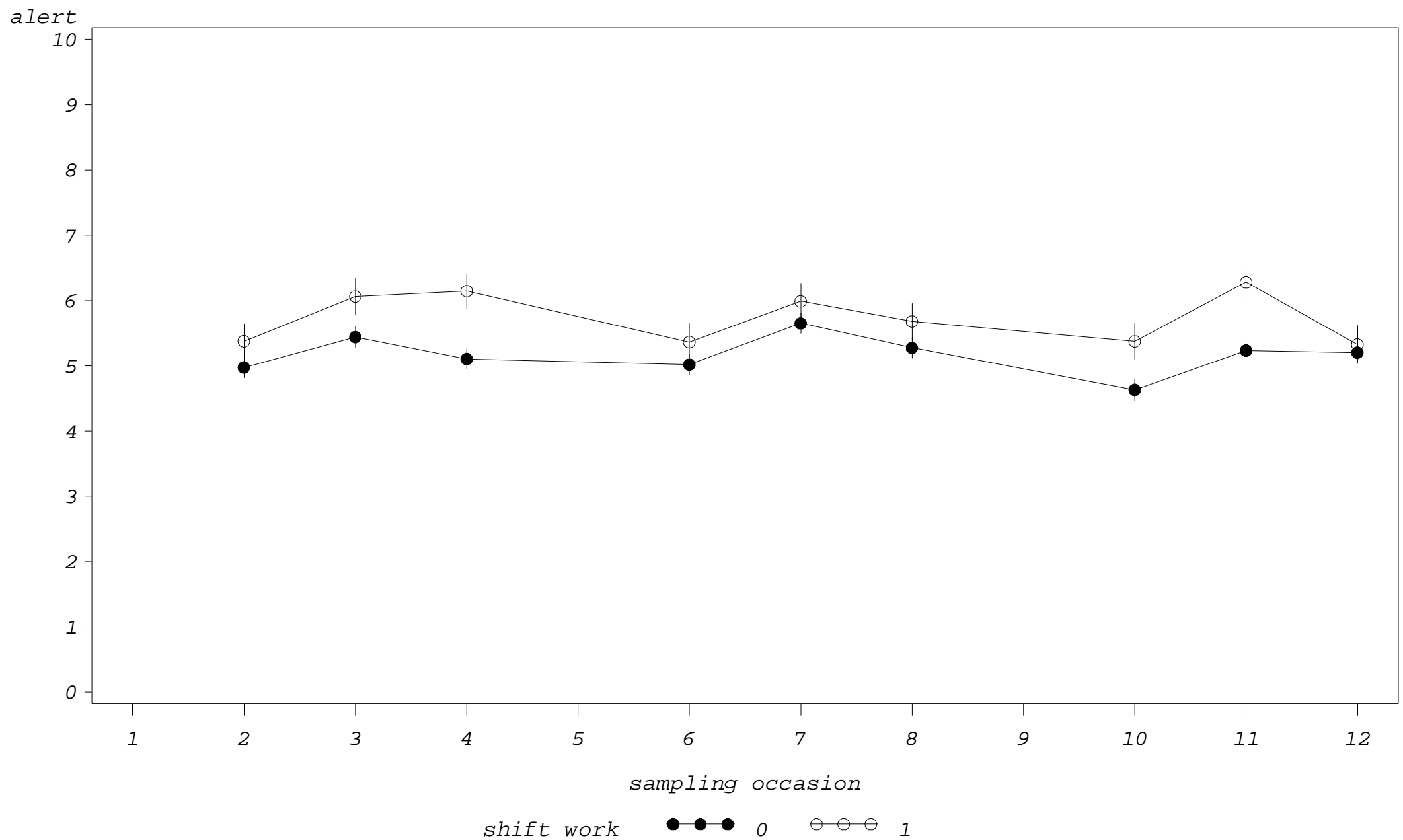
Study 2: diurnal profiles of calmness by gender



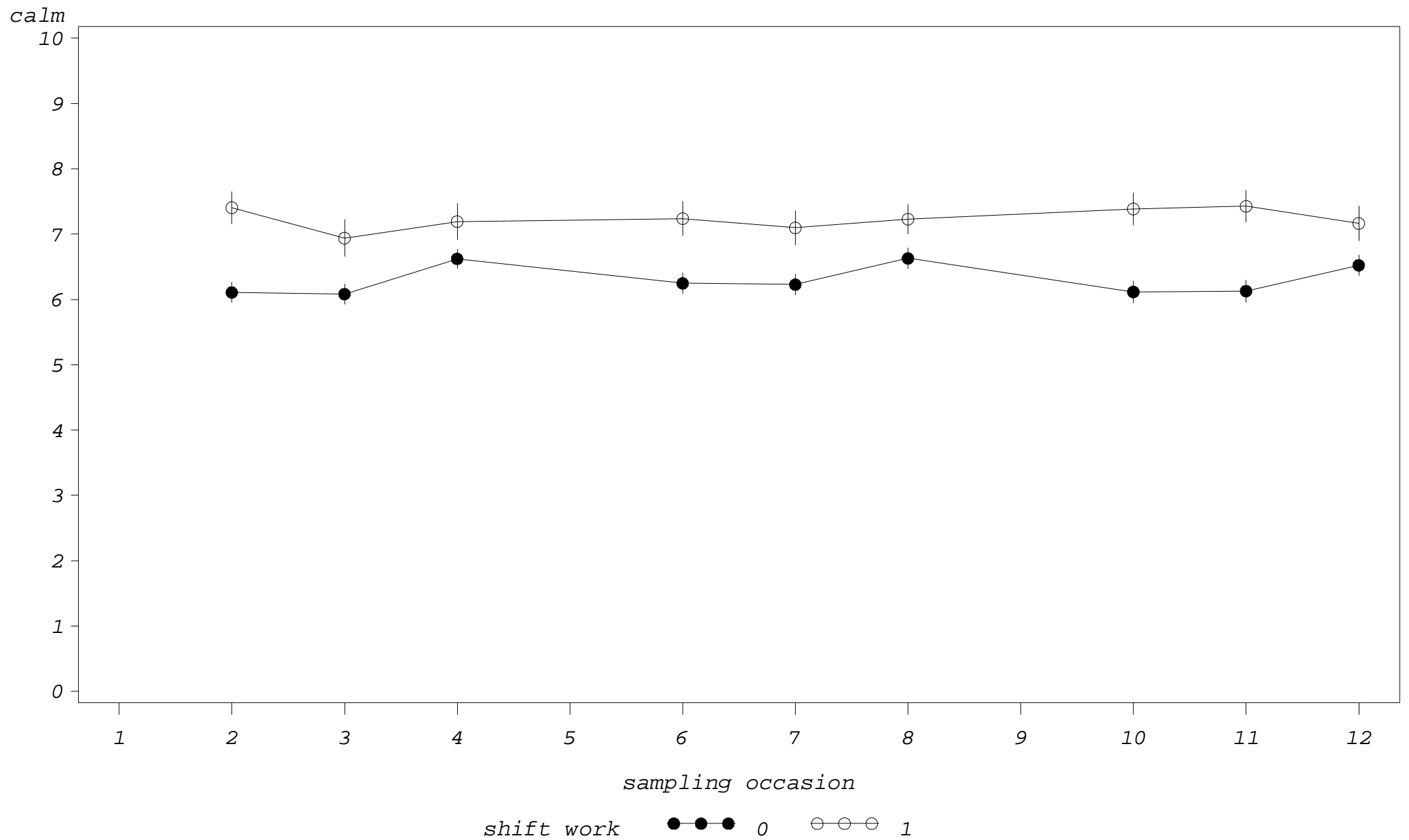
Study 2: diurnal profiles of mood by shift work



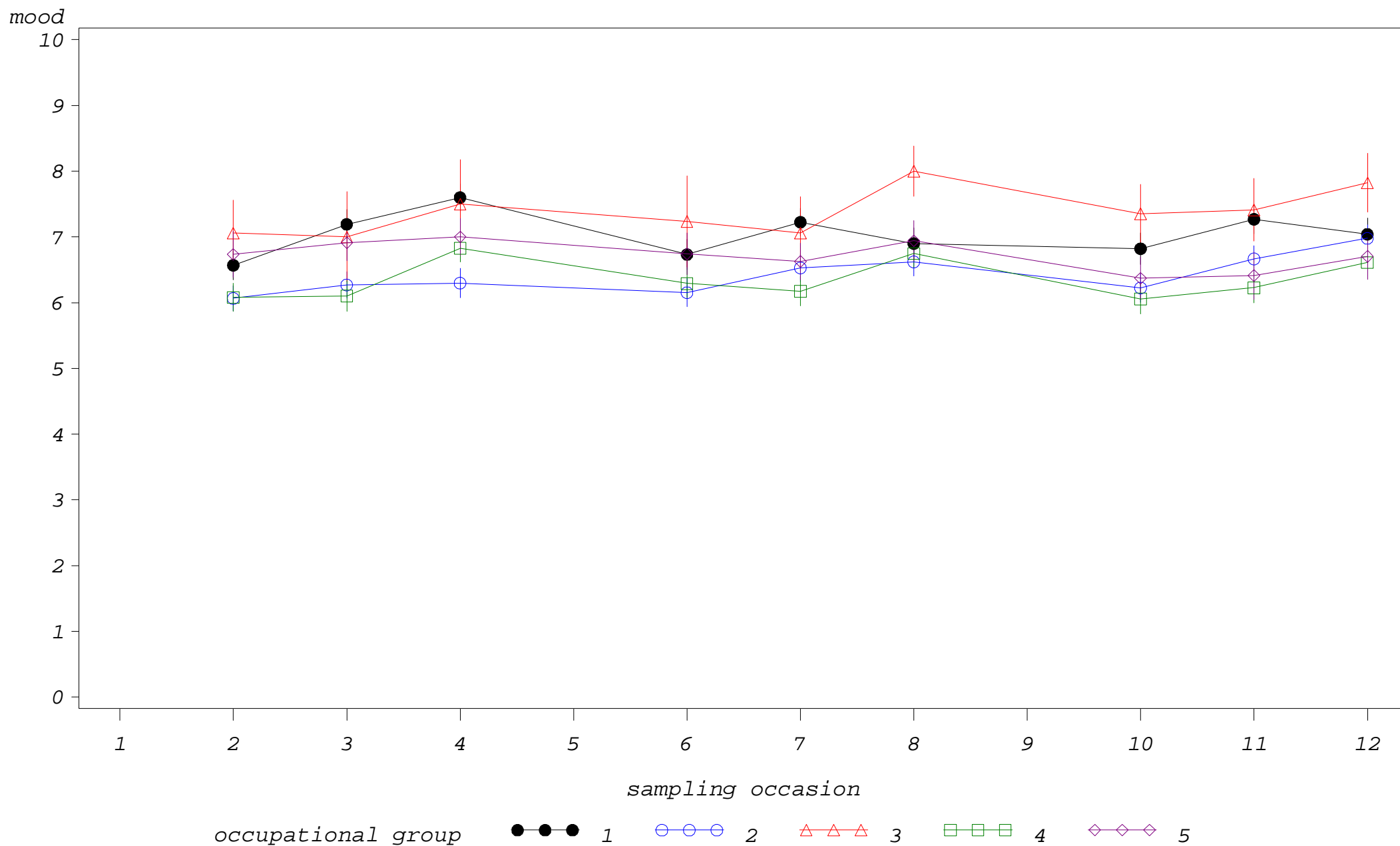
Study 2: diurnal profiles of alertness by shift work



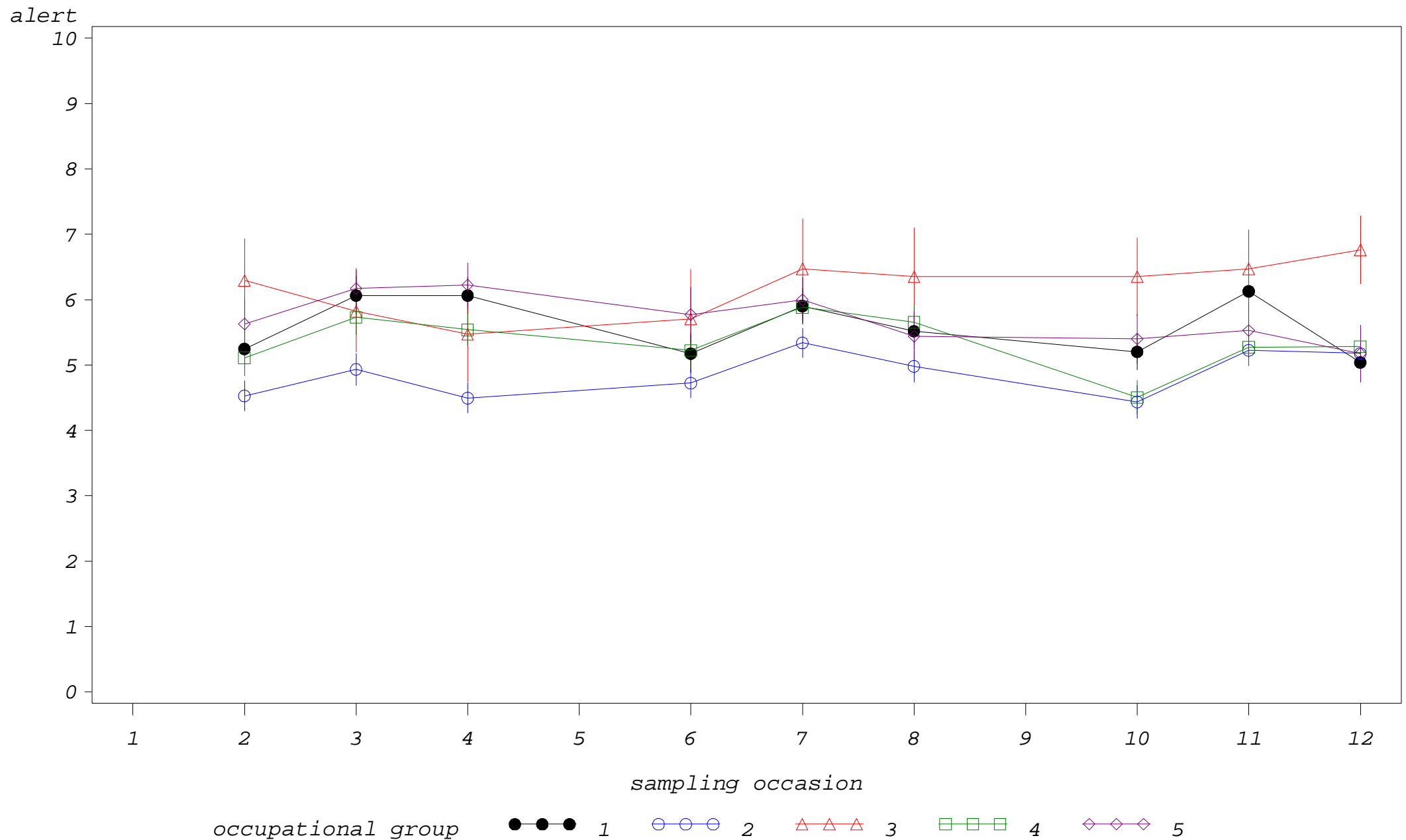
Study 2: diurnal profiles of calmness by shift work



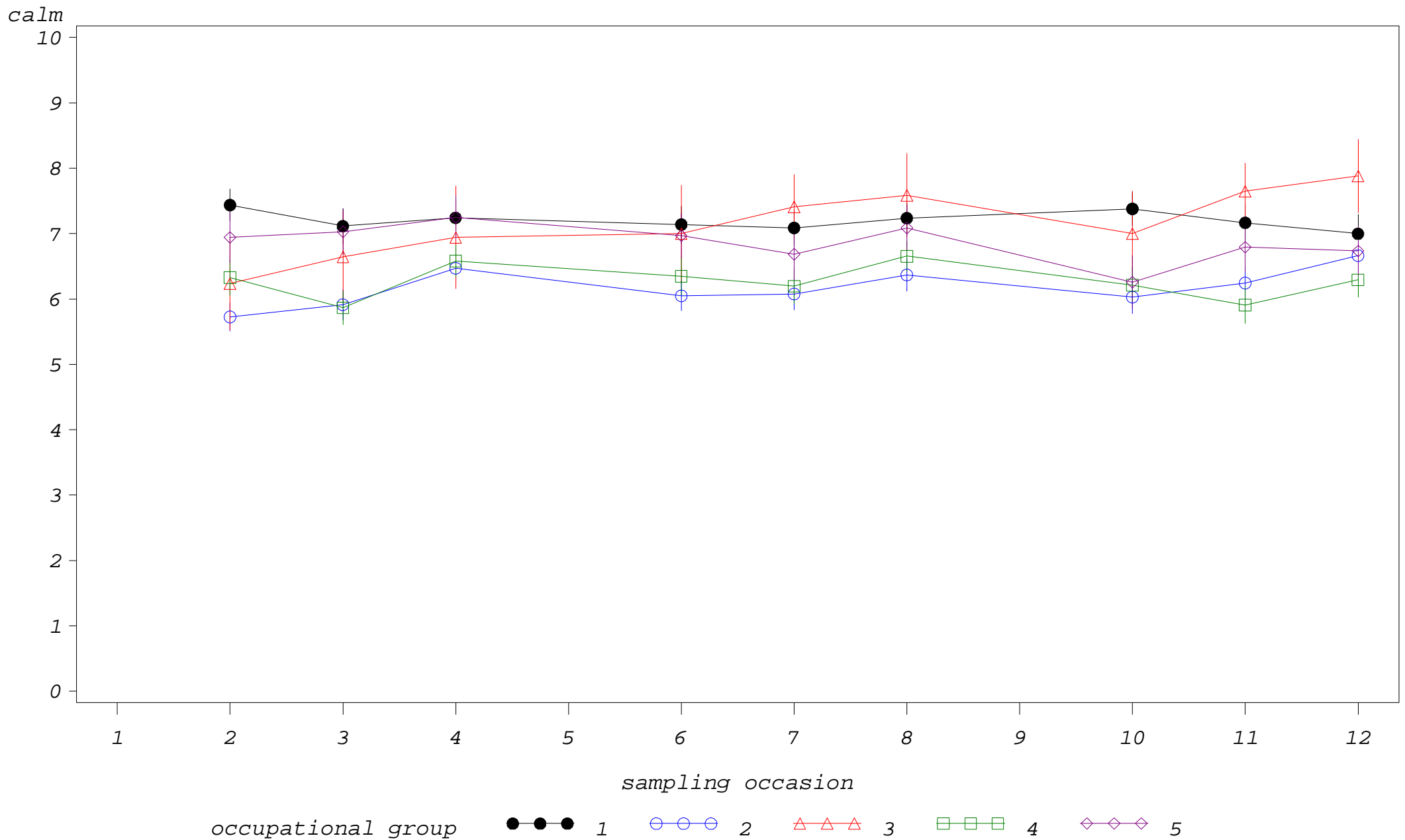
Study 2: diurnal profiles of mood by occupational group



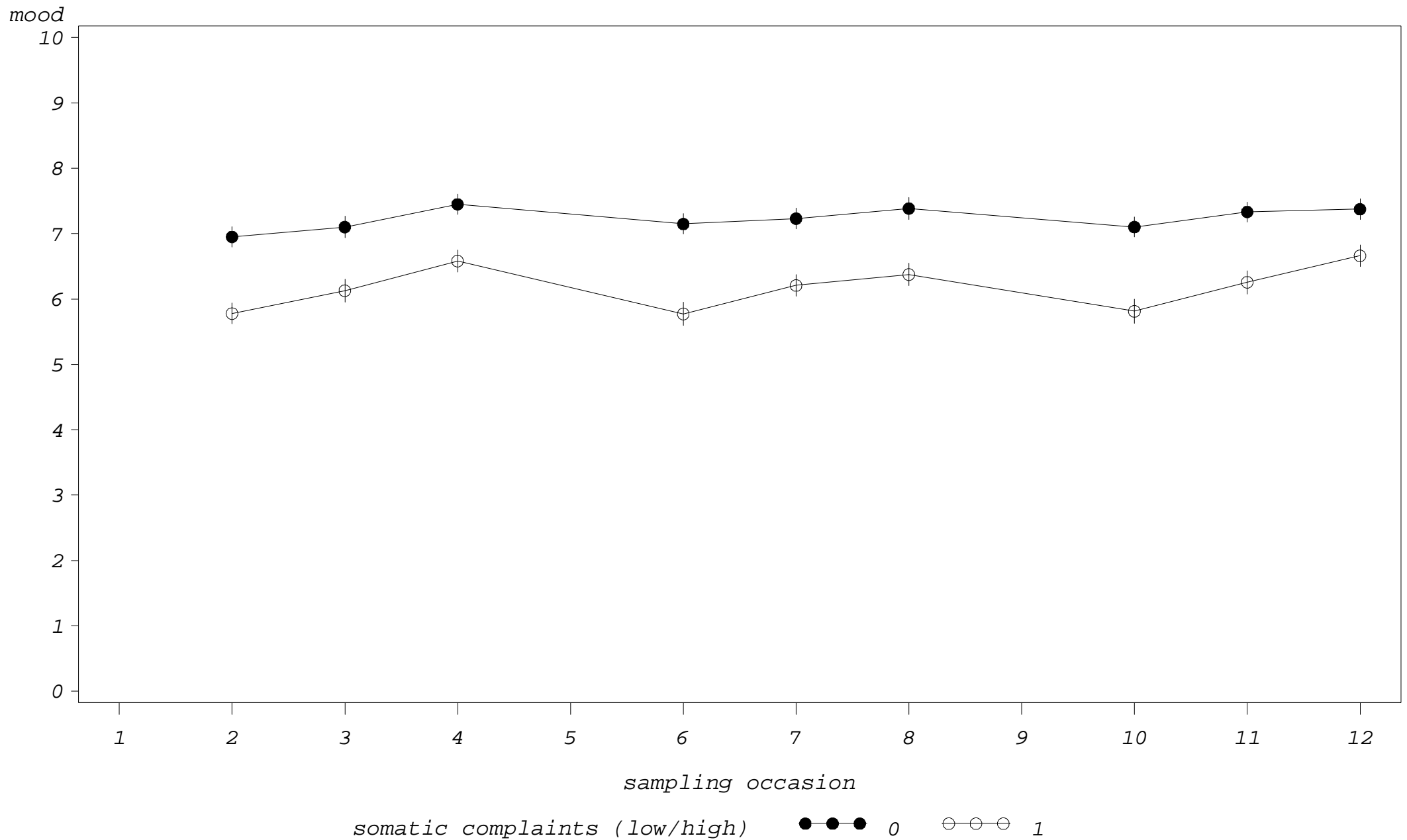
Study 2: diurnal profiles of alertness by occupational group



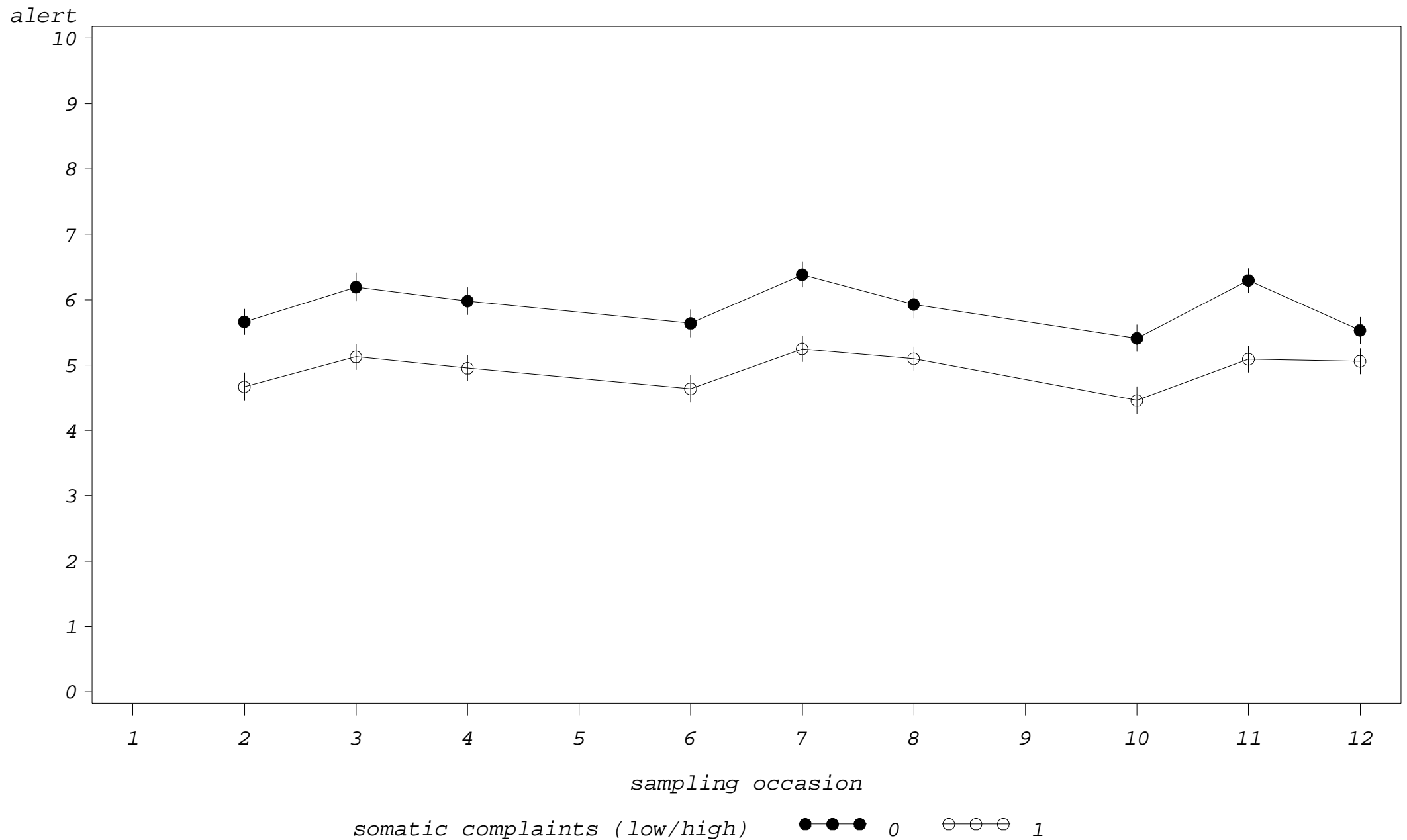
Study 2: diurnal profiles of calmness by occupational group



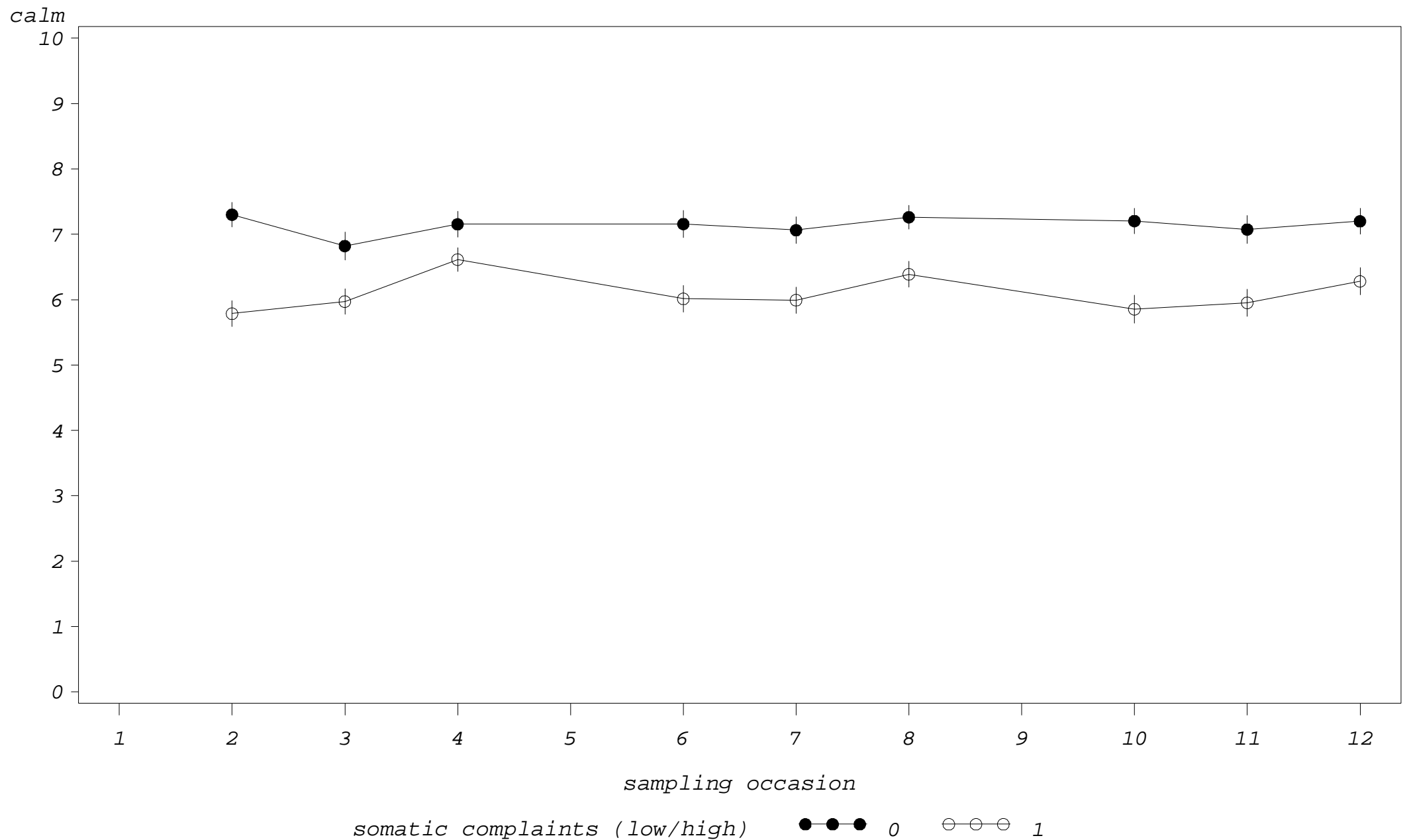
Study 2: diurnal profiles of mood by somatic complaints



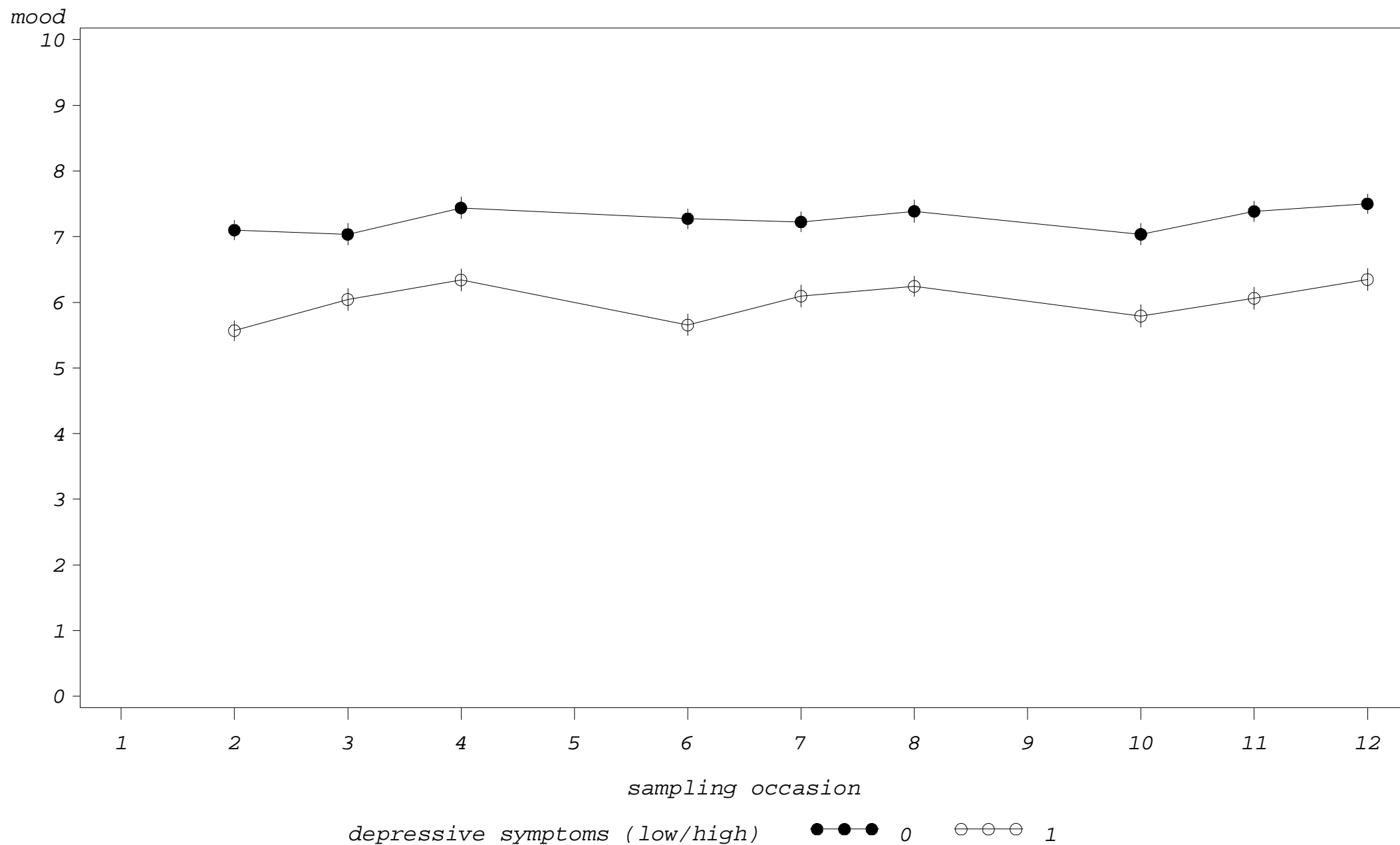
Study 2: diurnal profiles of alertness by somatic complaints



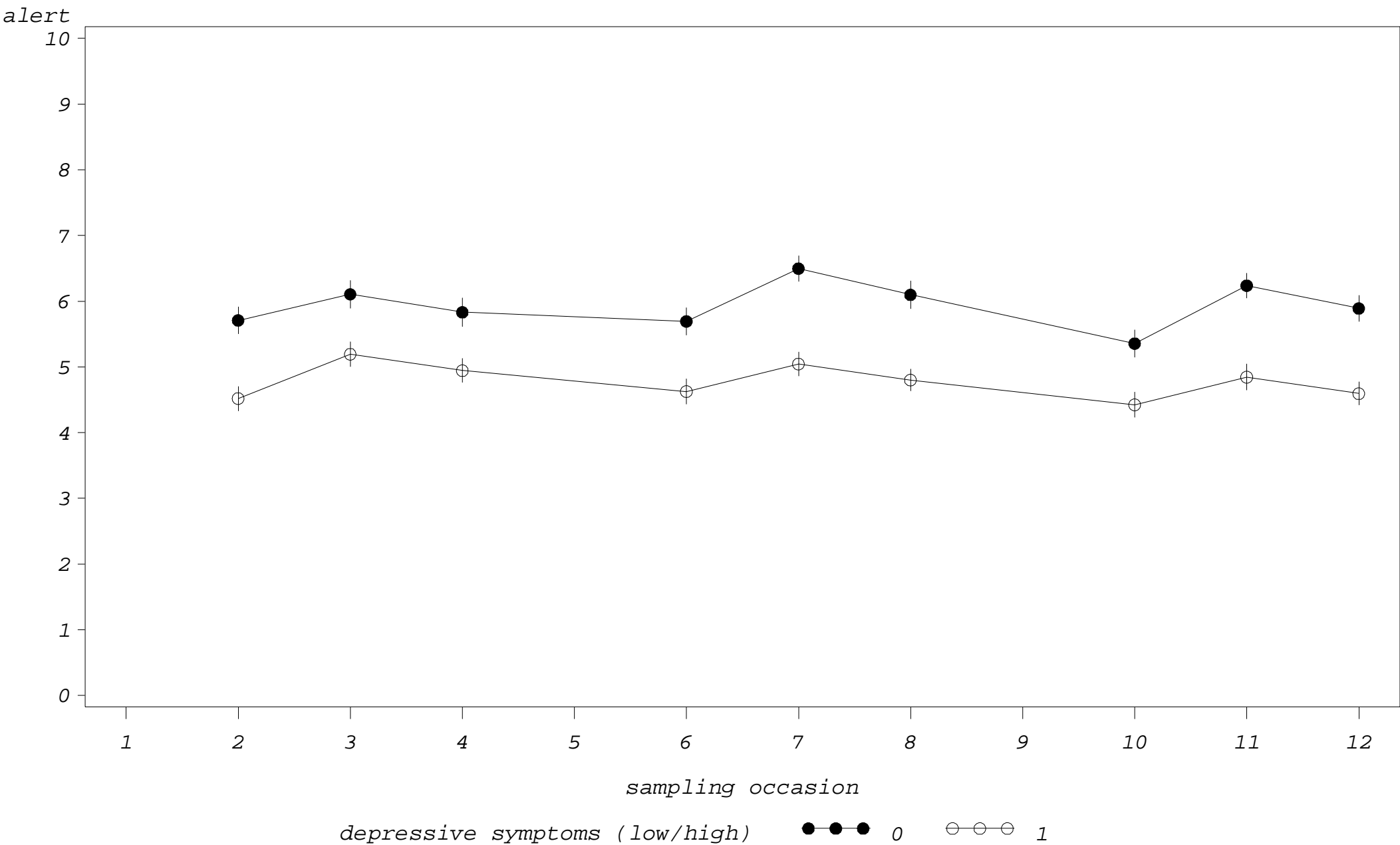
Study 2: diurnal profiles of calmness by somatic complaints



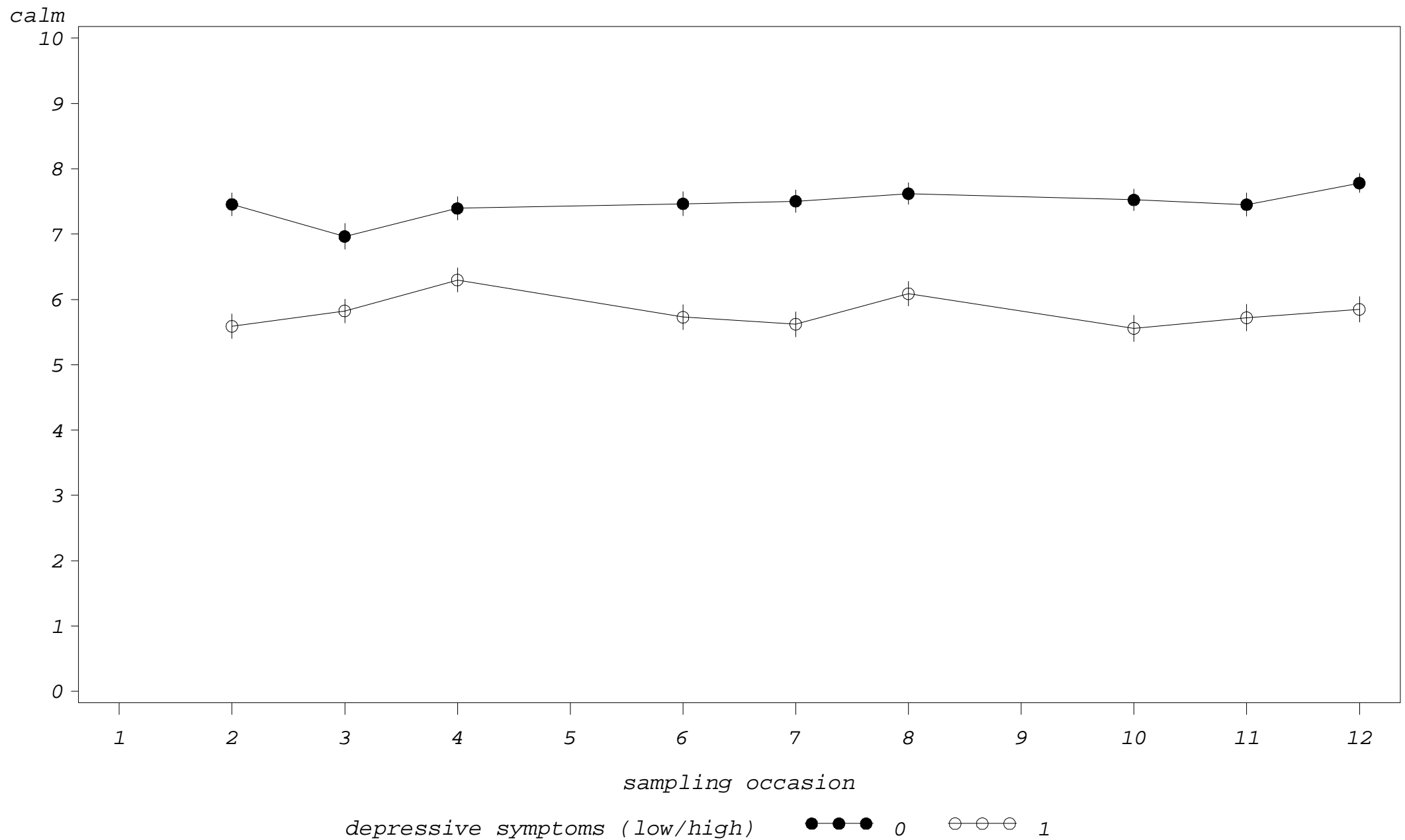
Study 2: diurnal profiles of mood by depressive symptoms



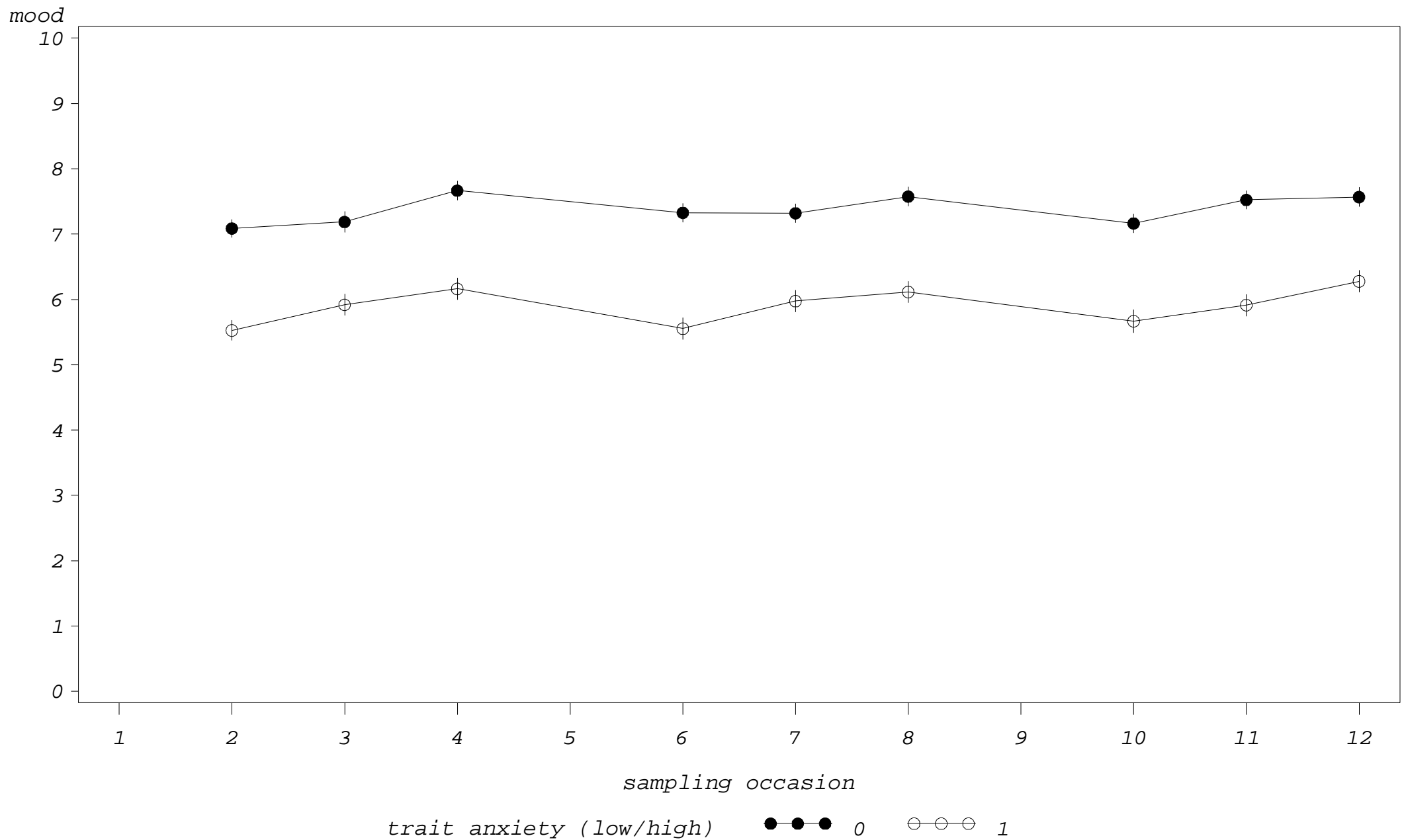
Study 2: diurnal profiles of alertness by depressive symptoms



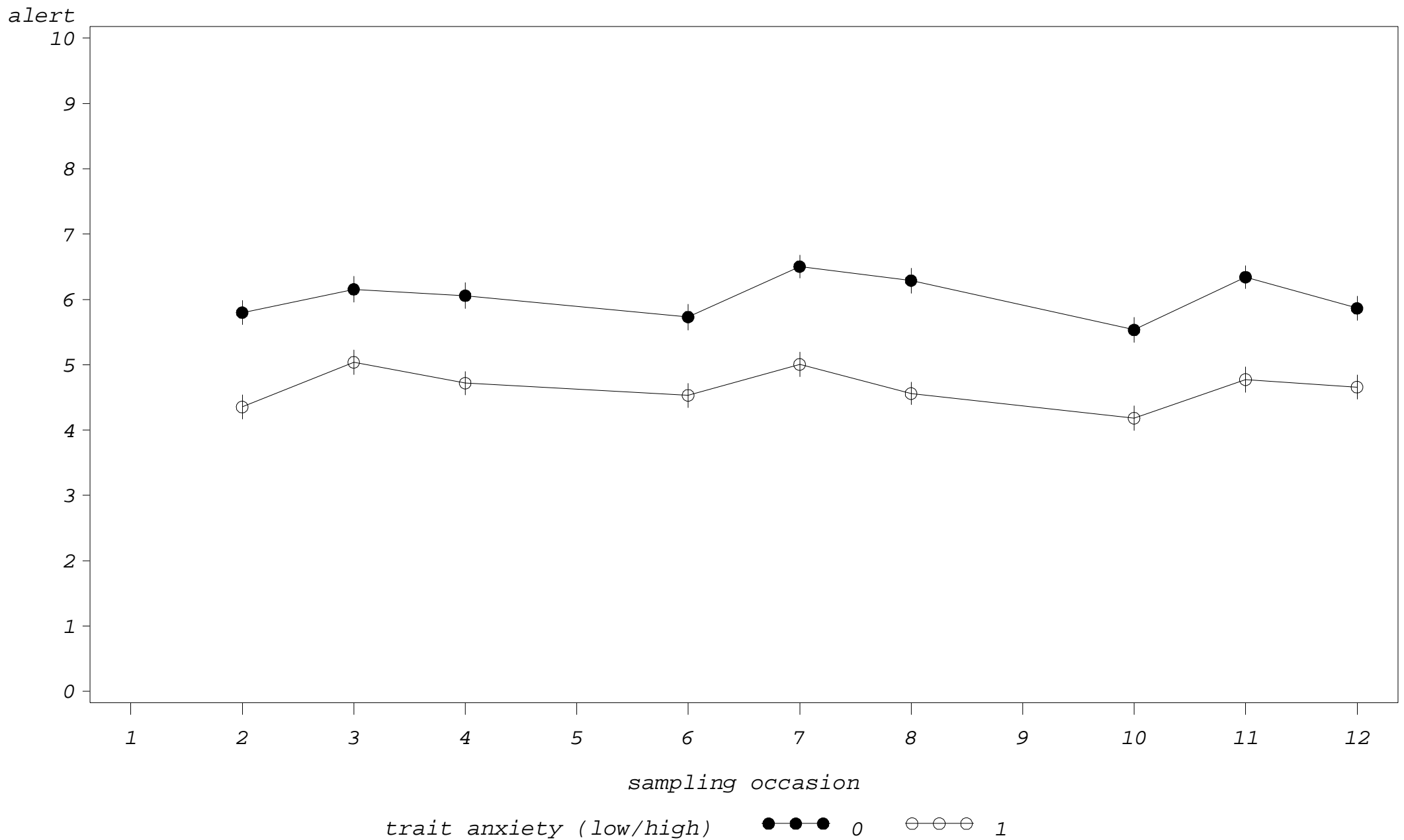
Study 2: diurnal profiles of calmness by depressive symptoms



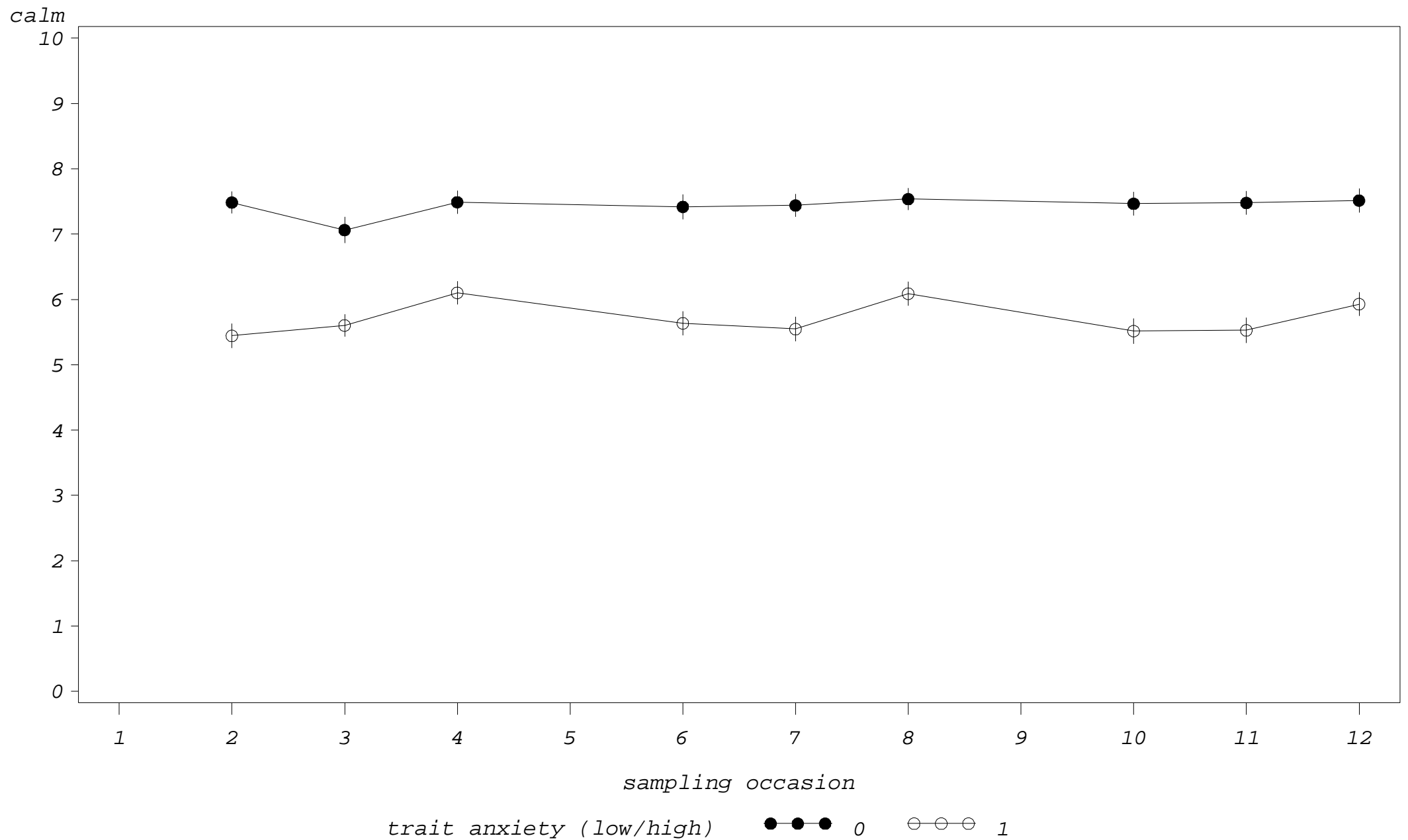
Study 2: diurnal profiles of mood by trait anxiety



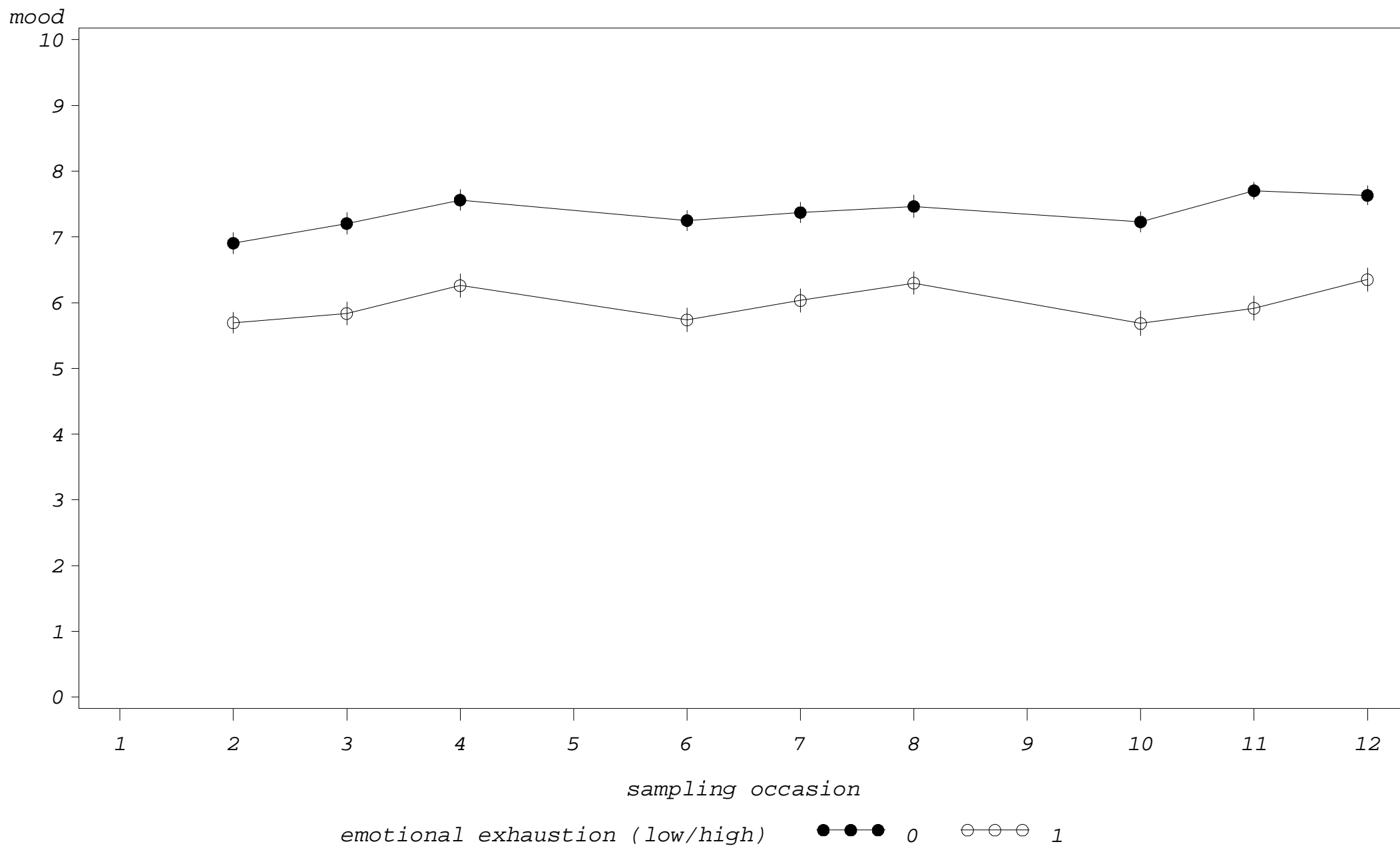
Study 2: diurnal profiles of alertness by trait anxiety



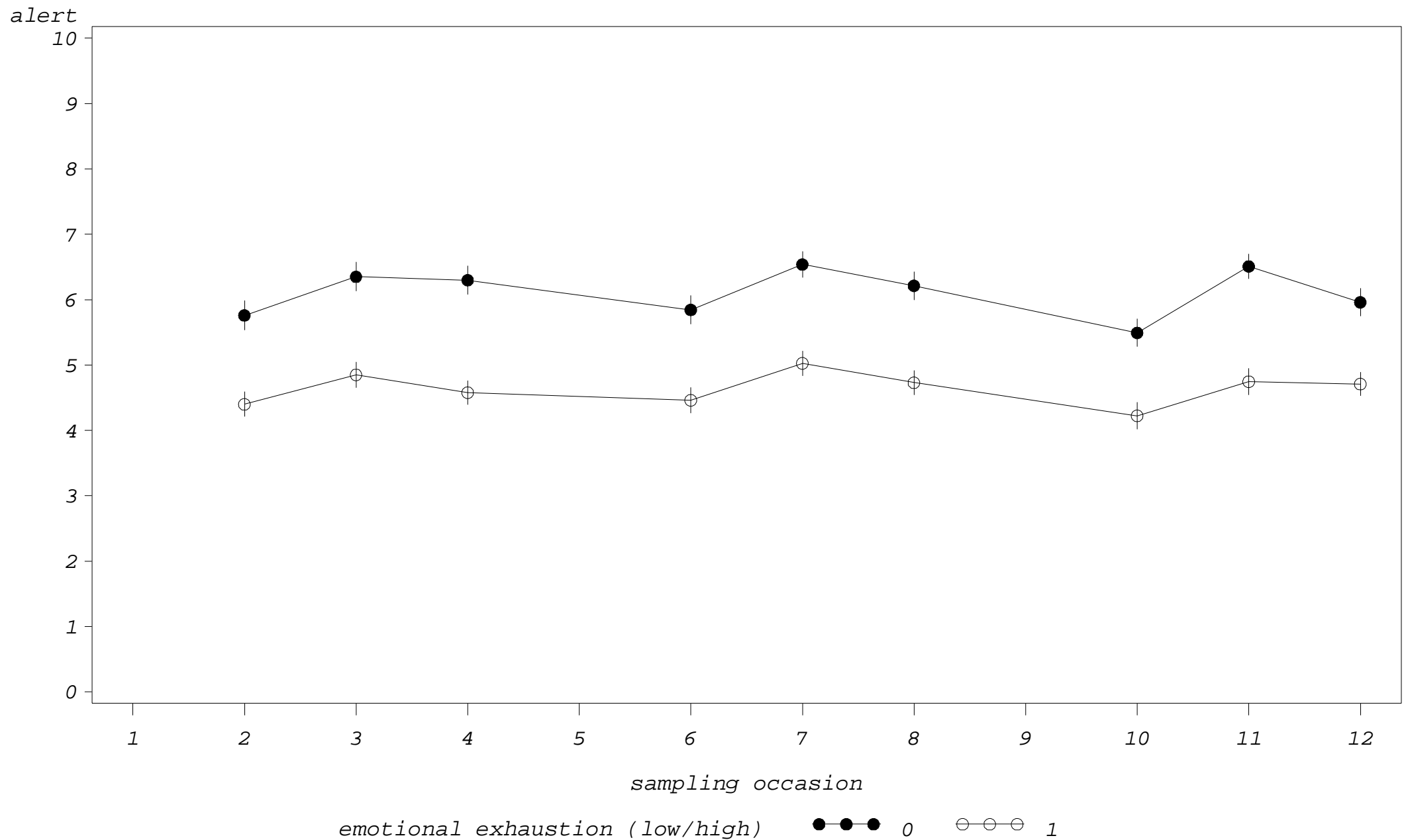
Study 2: diurnal profiles of calmness by trait anxiety



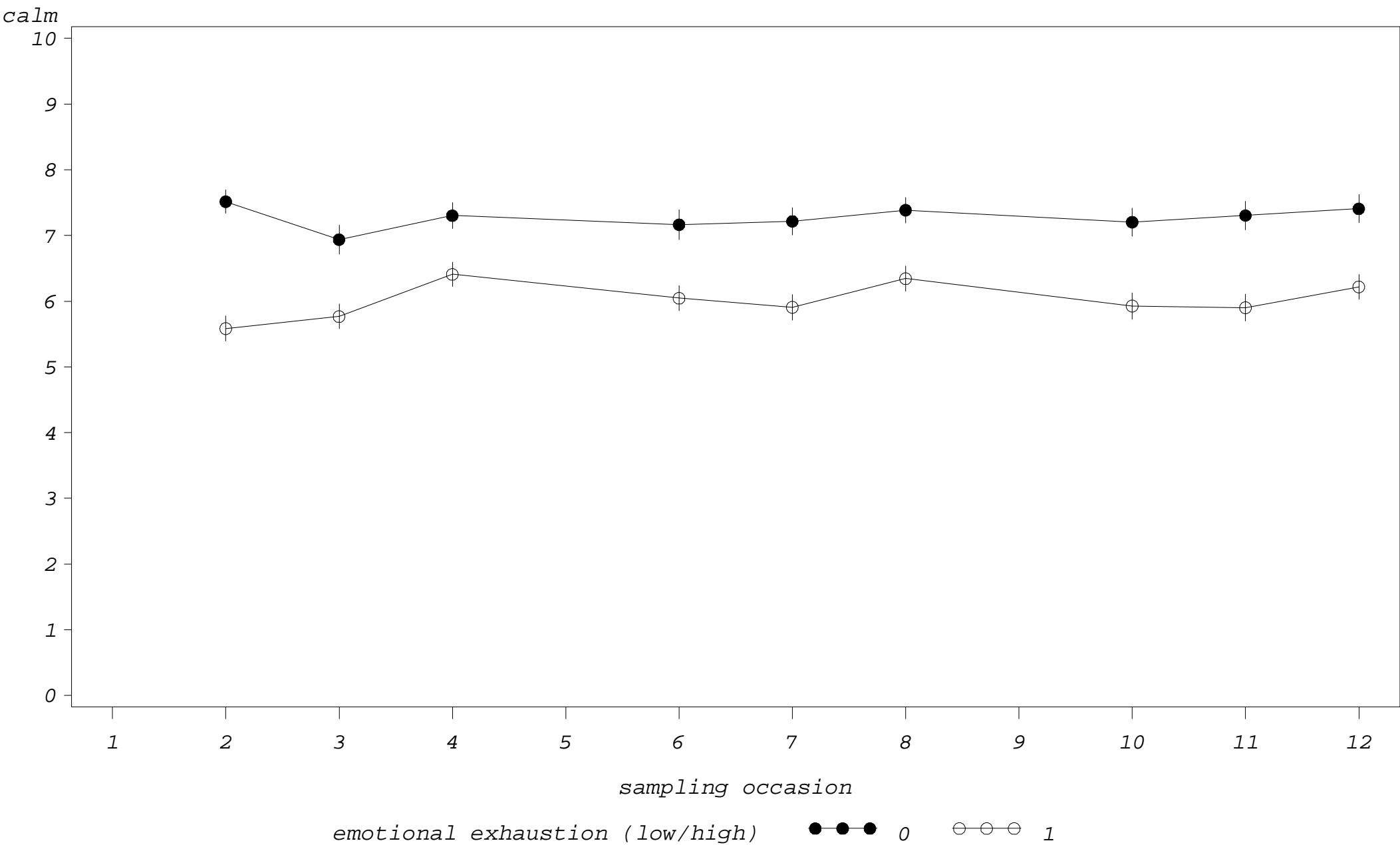
Study 2: diurnal profiles of mood by emotional exhaustion



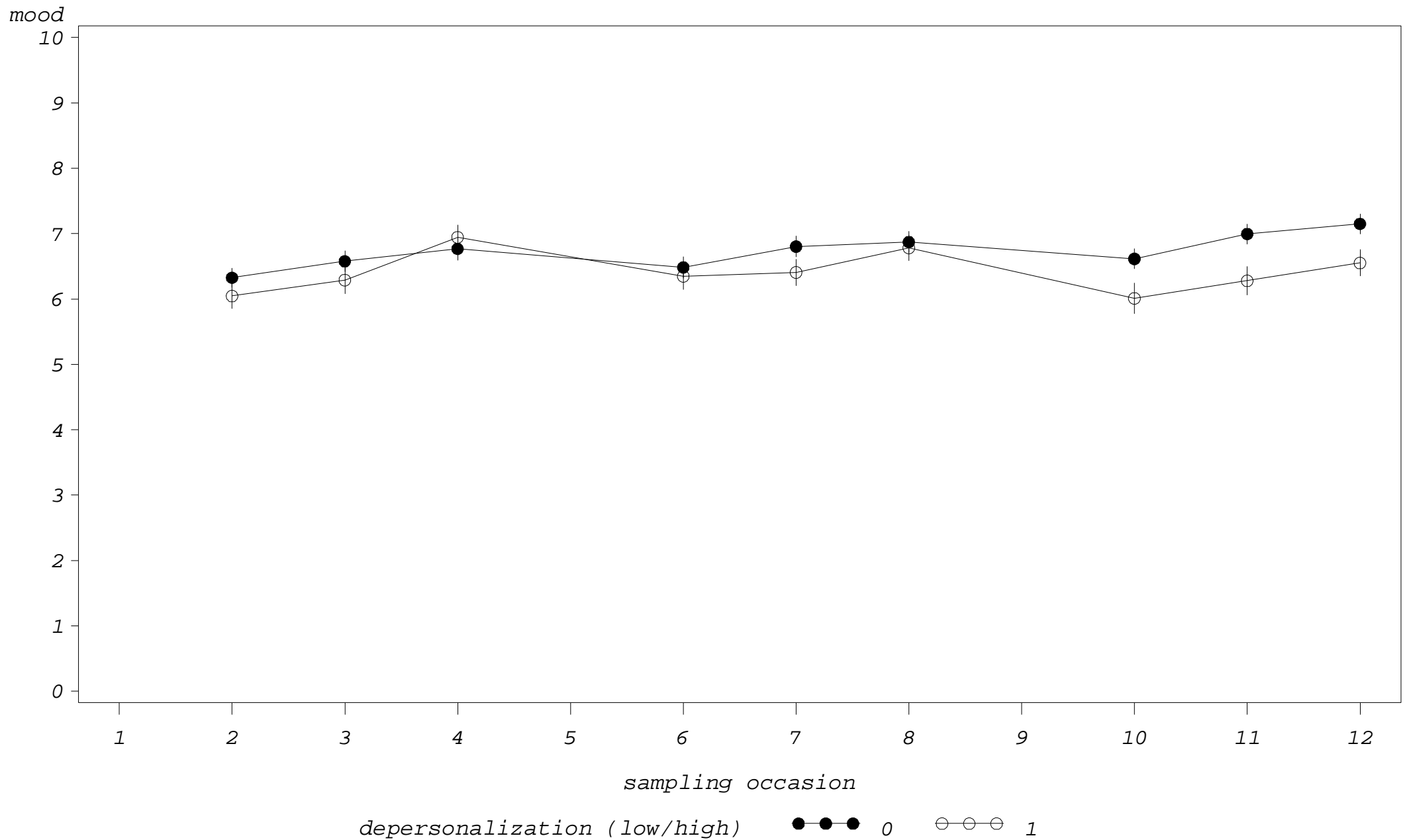
Study 2: diurnal profiles of alertness by emotional exhaustion



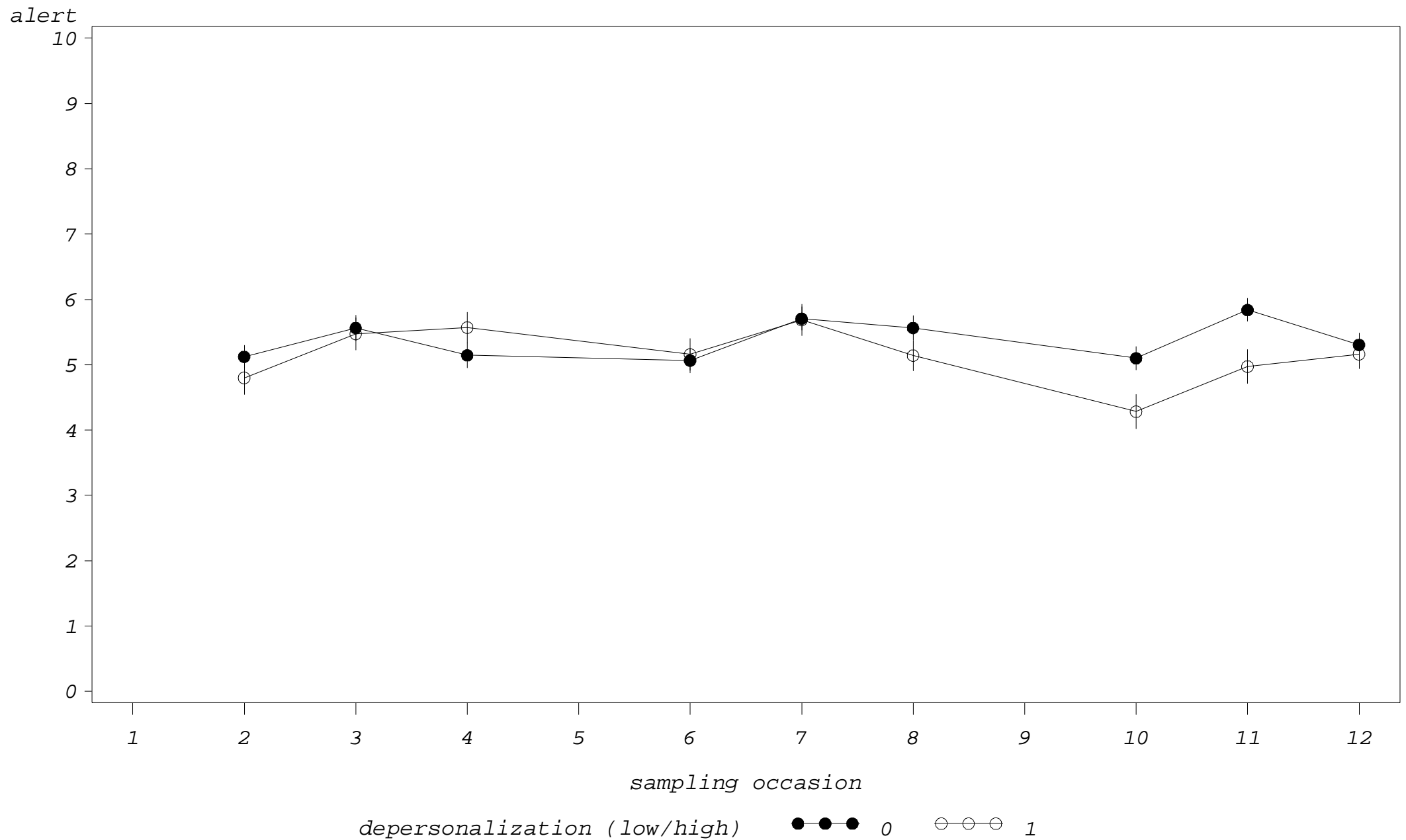
Study 2: diurnal profiles of calmness by emotional exhaustion



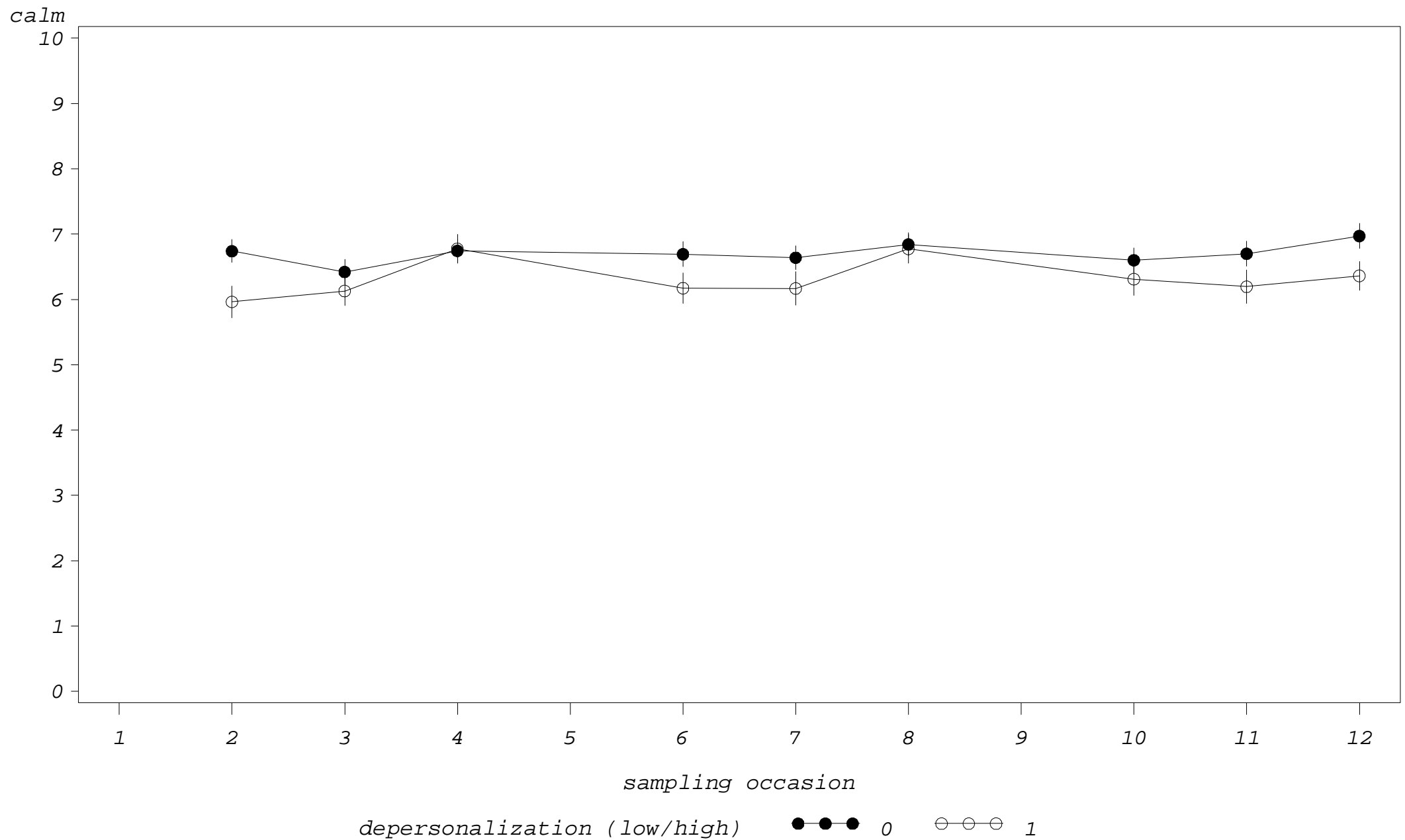
Study 2: diurnal profiles of mood by depersonalization



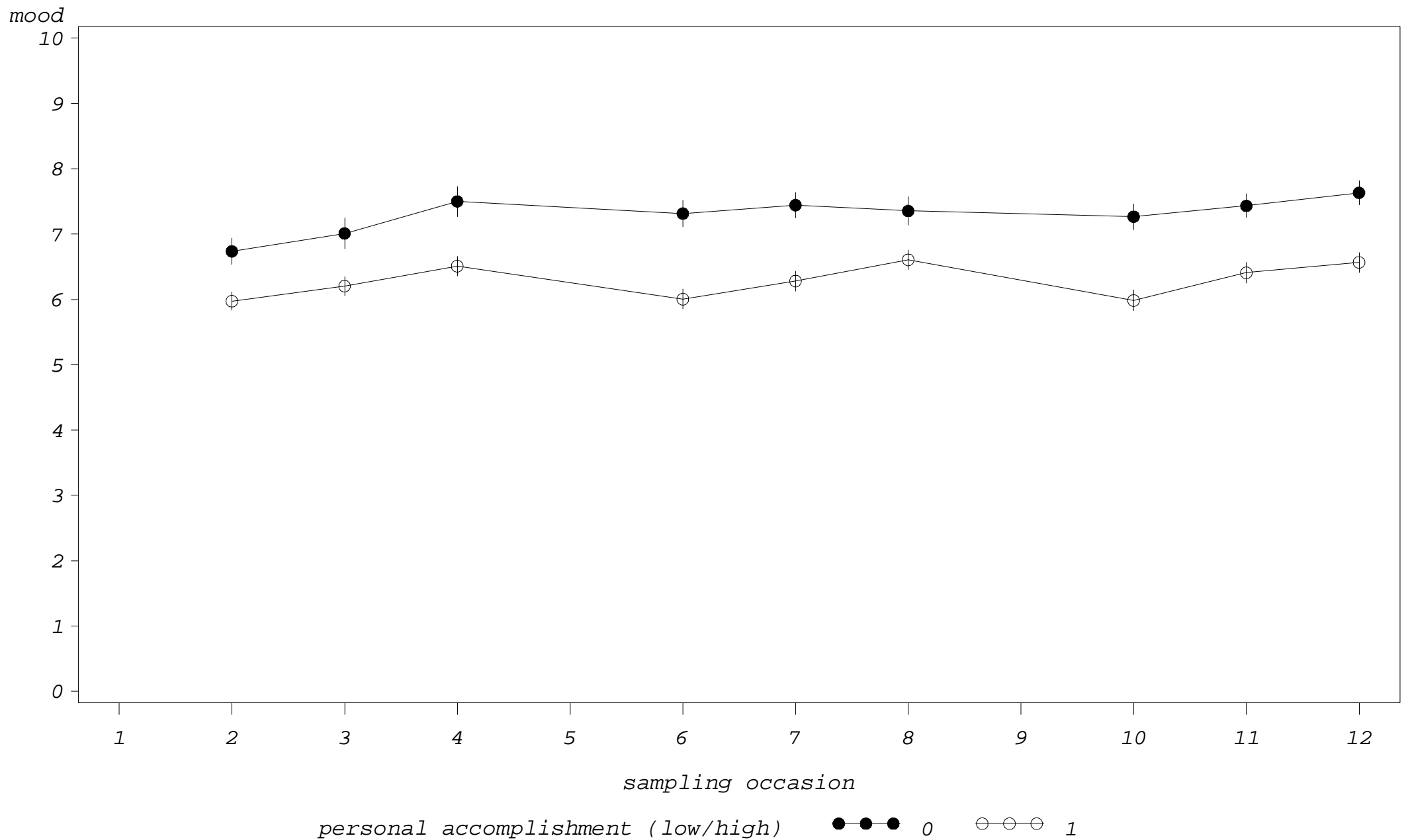
Study 2: diurnal profiles of alertness by: depersonalization



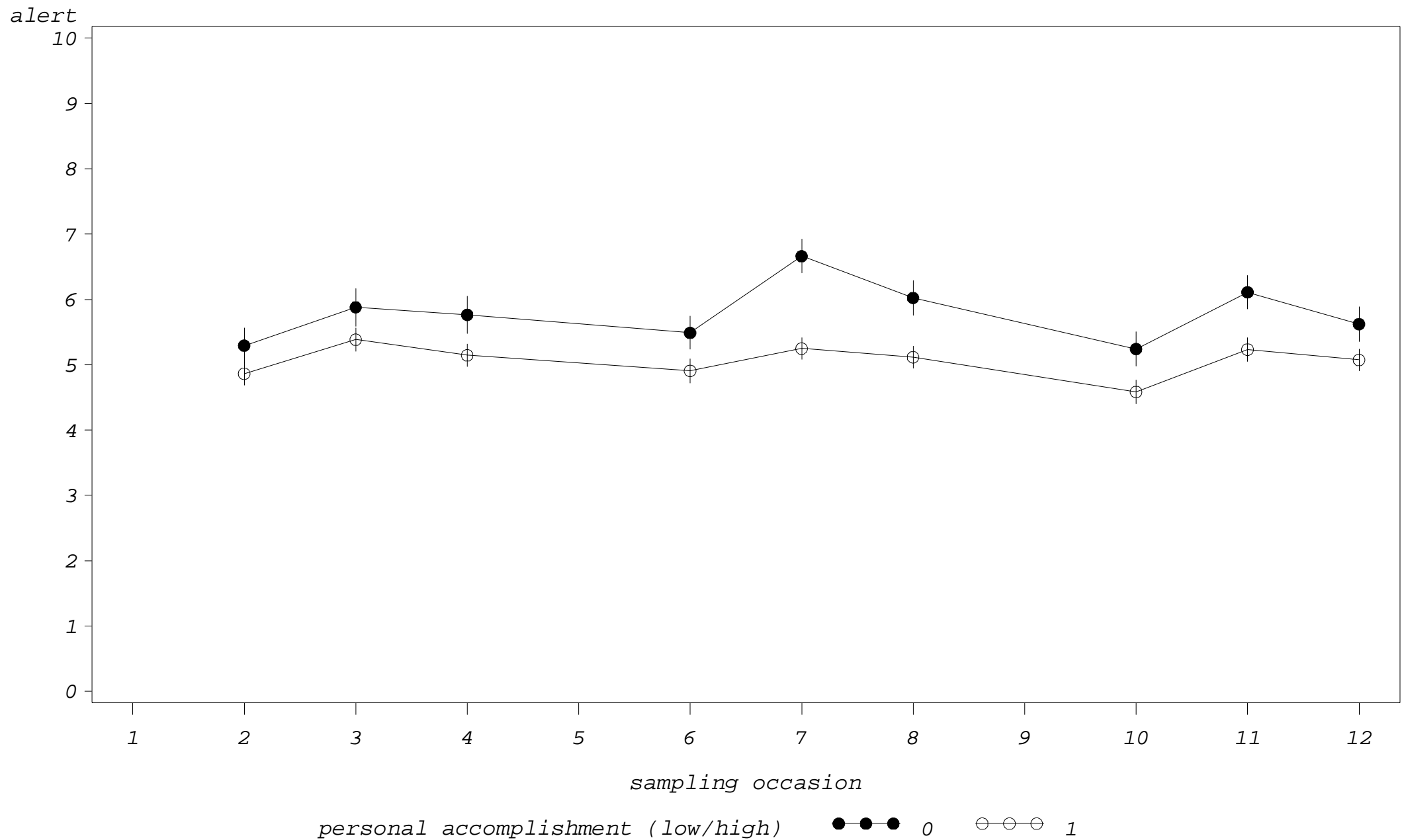
Study 2: diurnal profiles of calmness by depersonalization



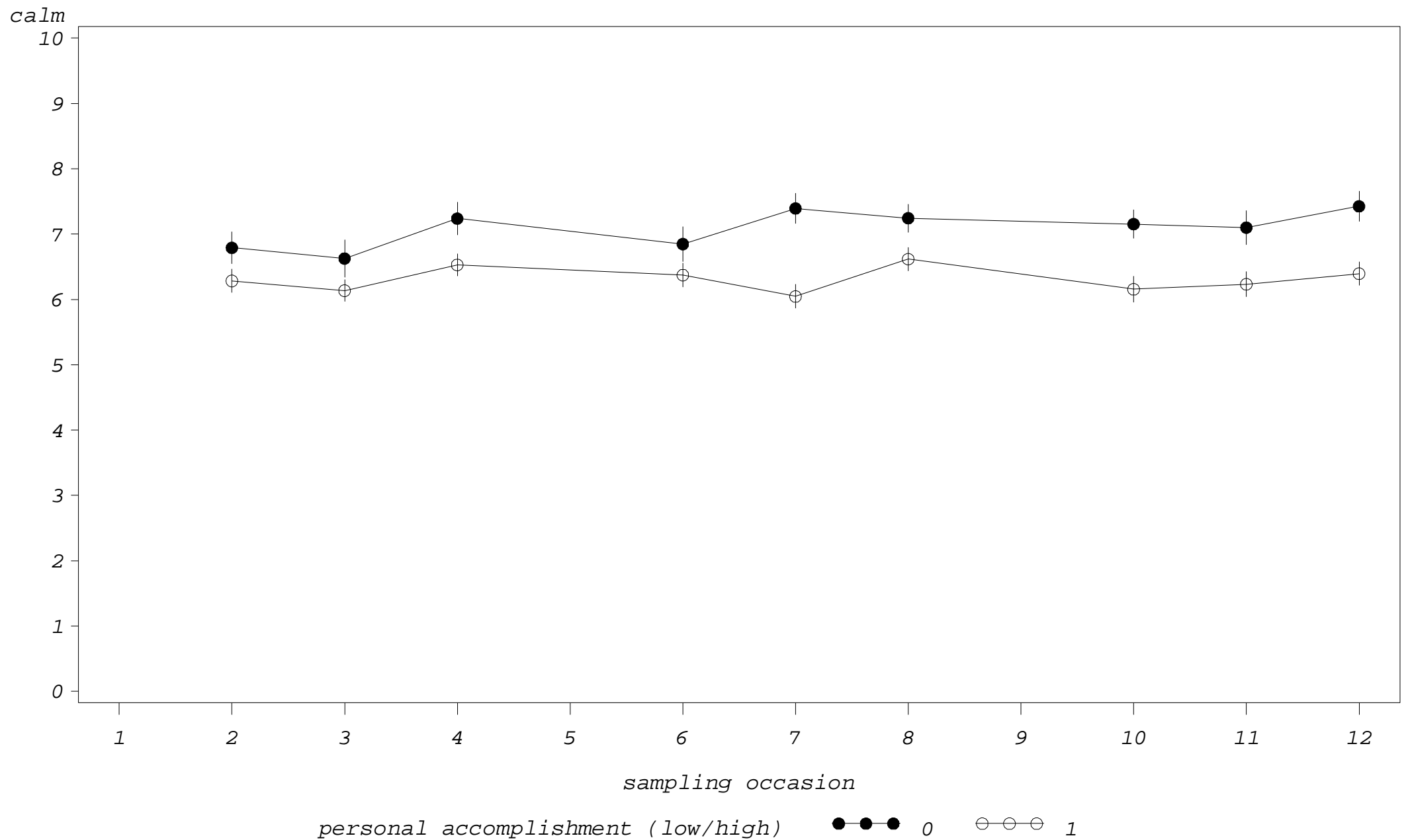
Study 2: diurnal profiles of mood by personal accomplishment



Study 2: diurnal profiles of alertness by personal accomplishment



Study 2: diurnal profiles of calmness by personal accomplishment

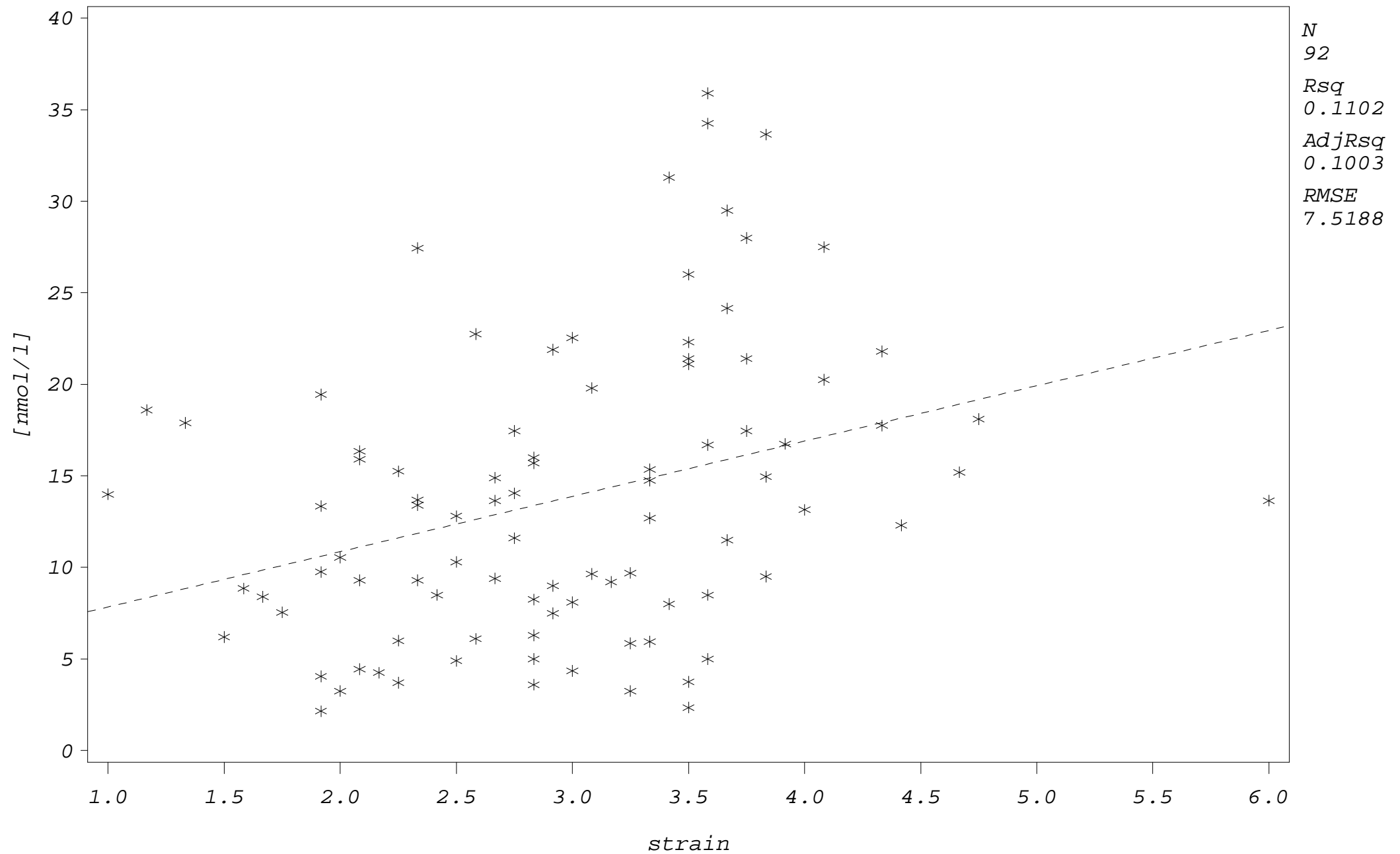


Appendix 4.2

Cortisol Levels and Mood / Strain

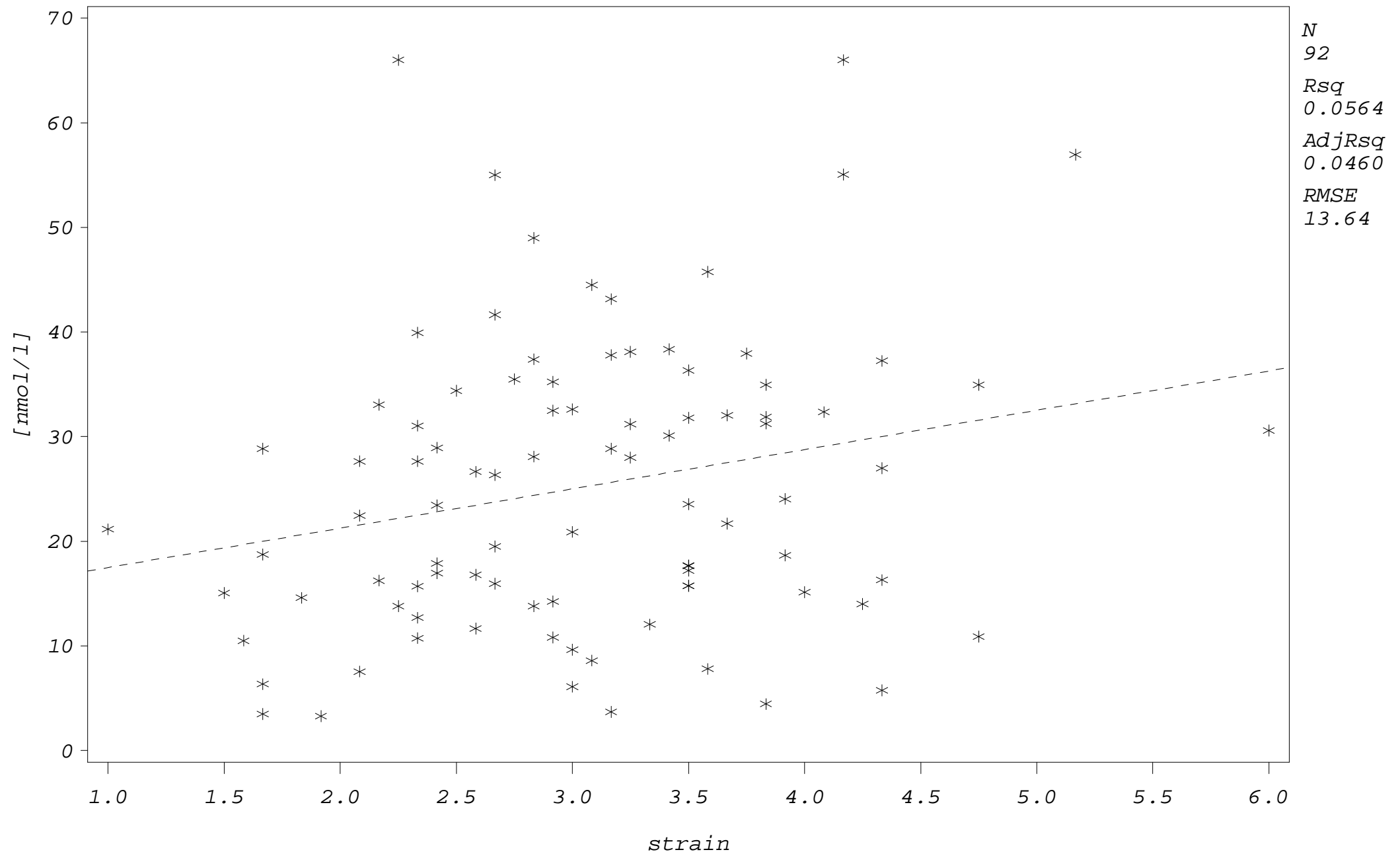
Study 1: cortisol levels * psychological strain (entire sample)

sampling occasion=1



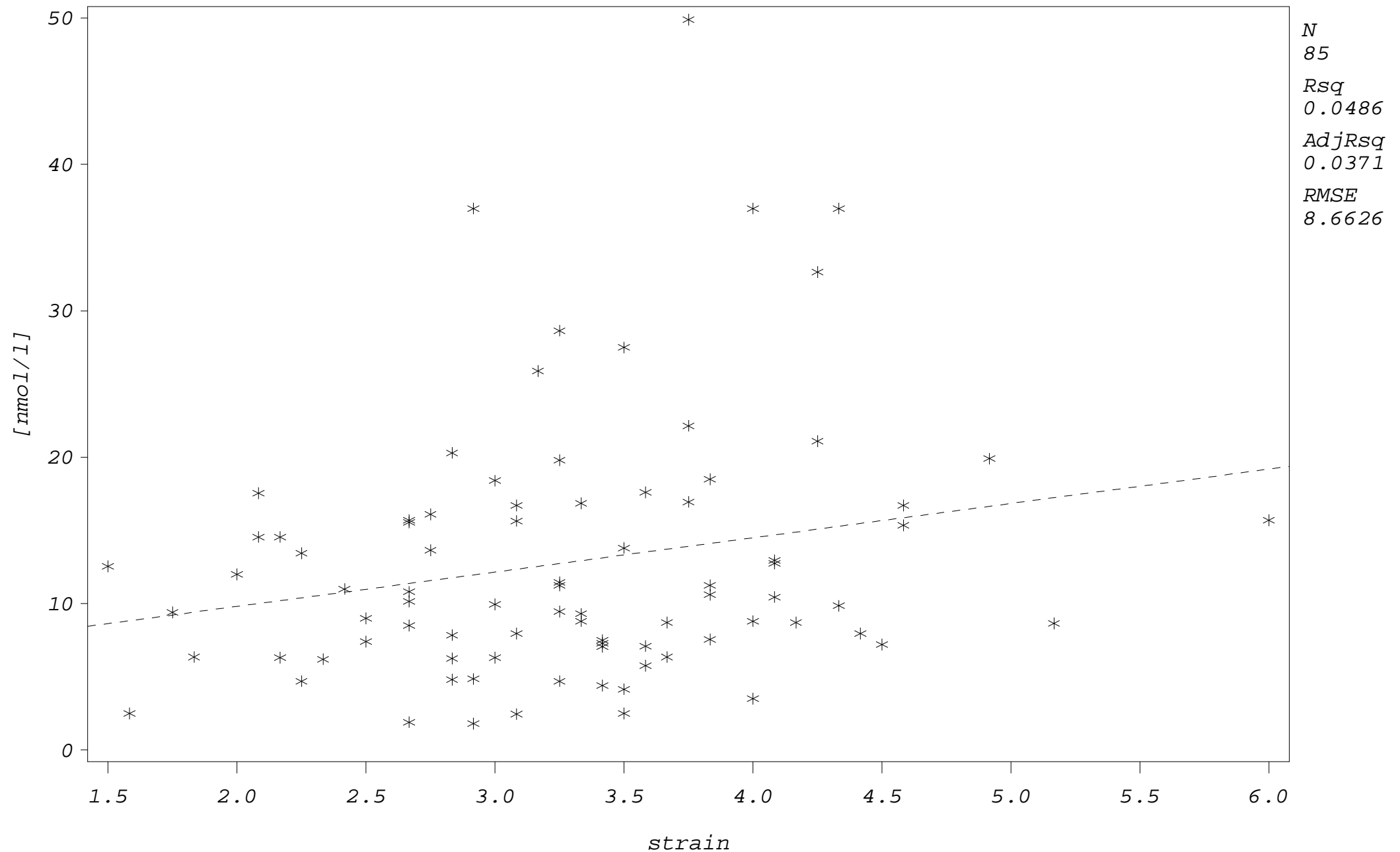
Study 1: cortisol levels * psychological strain (entire sample)

sampling occasion=2



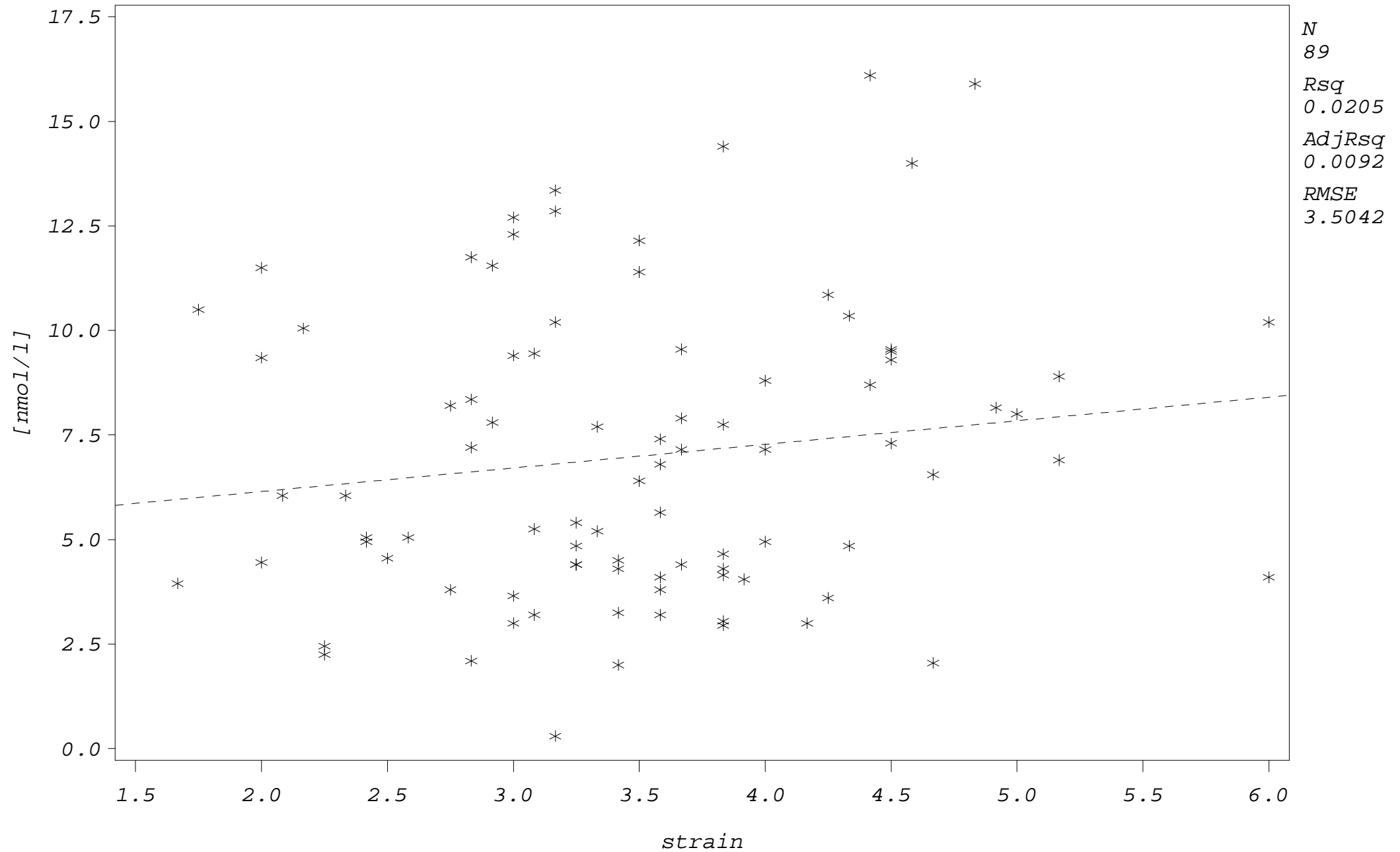
Study 1: cortisol levels * psychological strain (entire sample)

sampling occasion=3



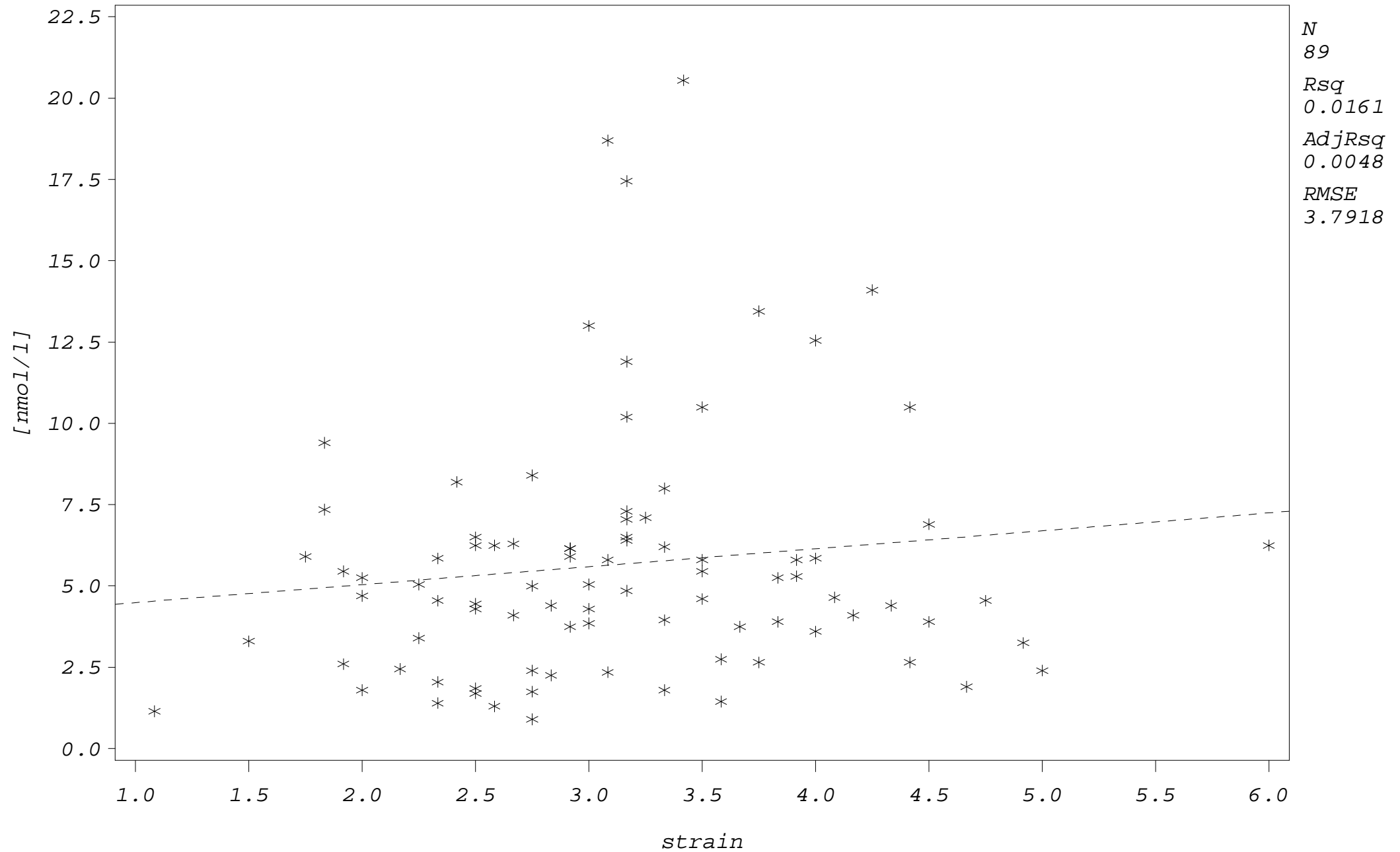
Study 1: cortisol levels * psychological strain (entire sample)

sampling occasion=4



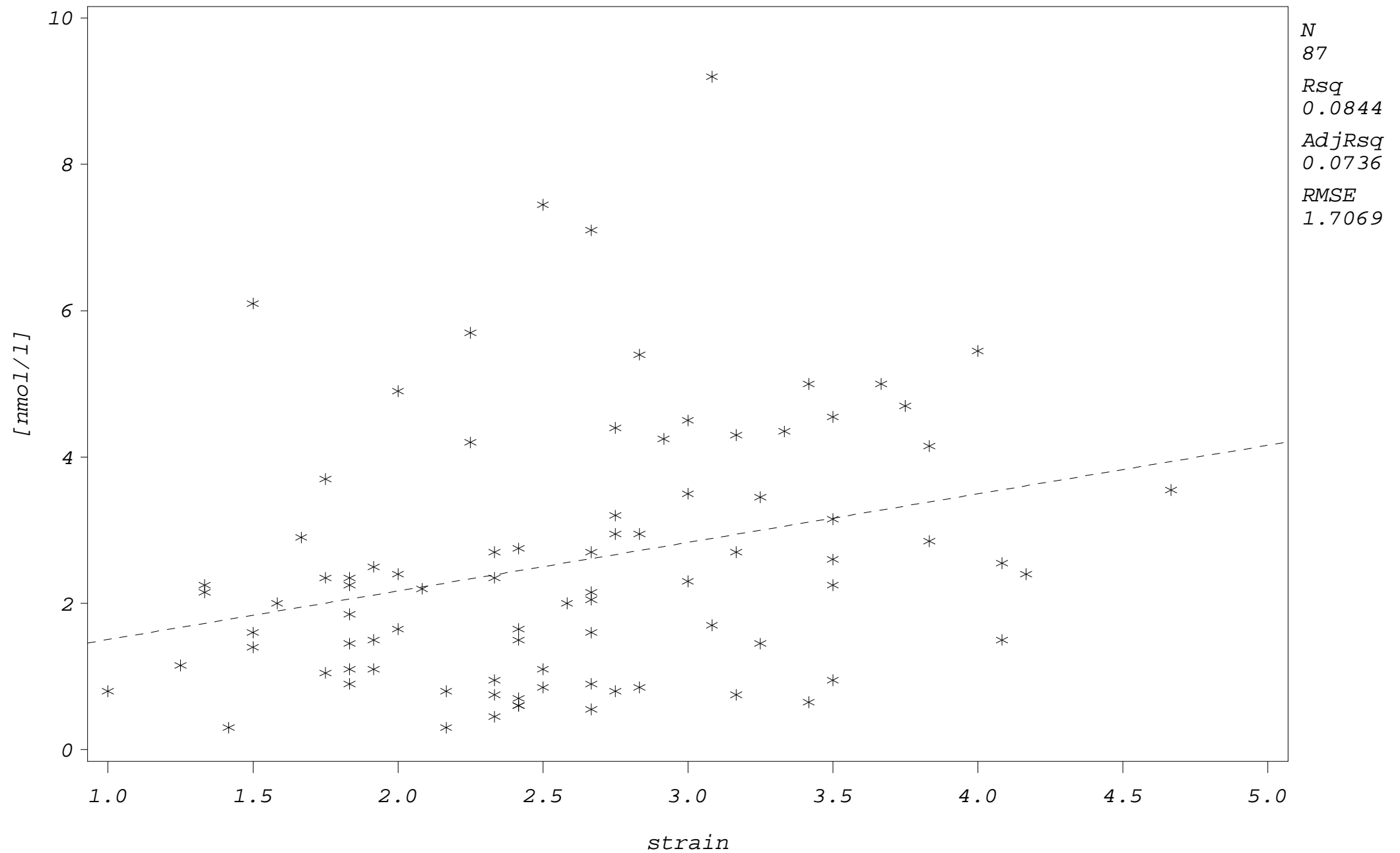
Study 1: cortisol levels * psychological strain (entire sample)

sampling occasion=5



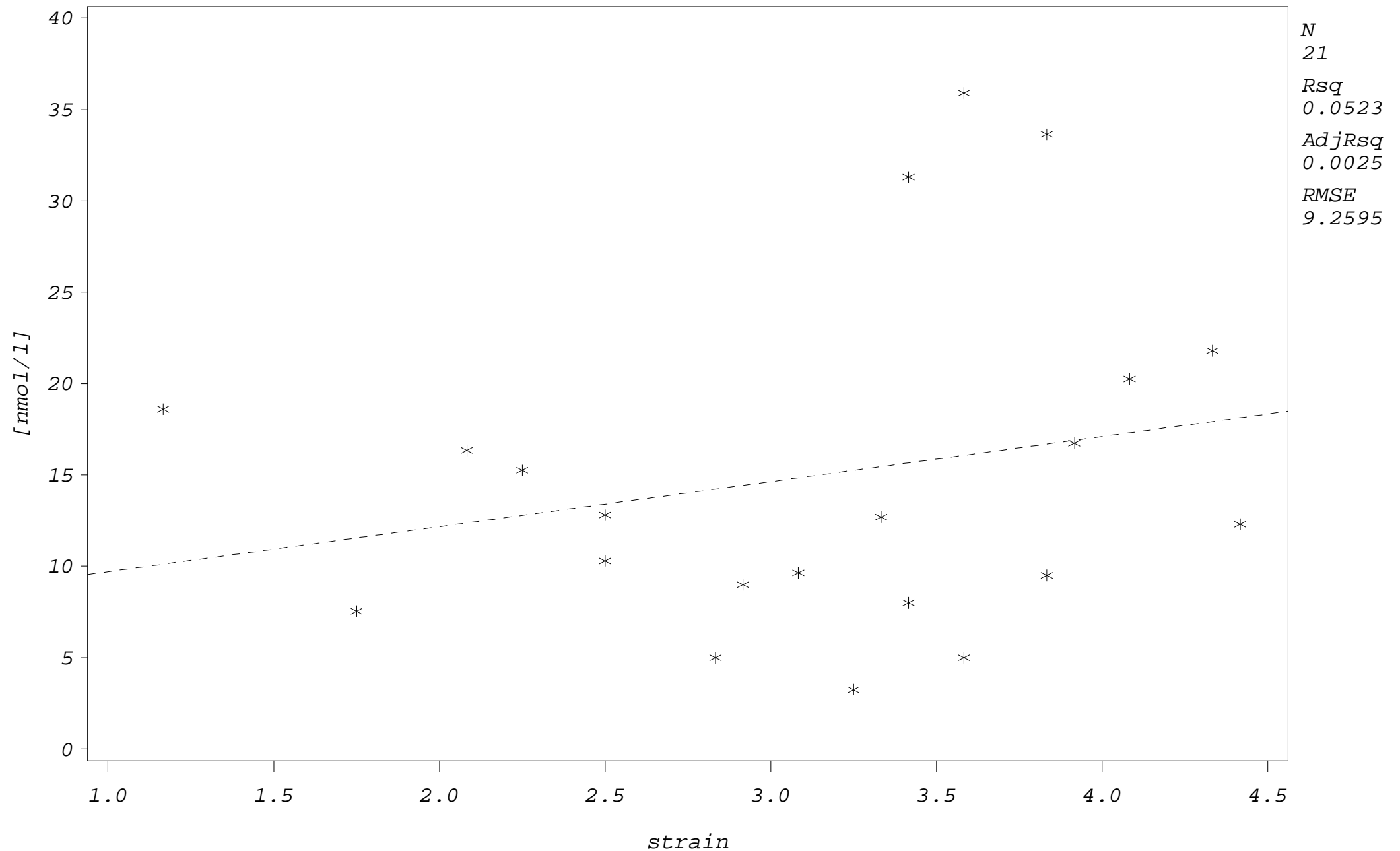
Study 1: cortisol levels * psychological strain (entire sample)

sampling occasion=6



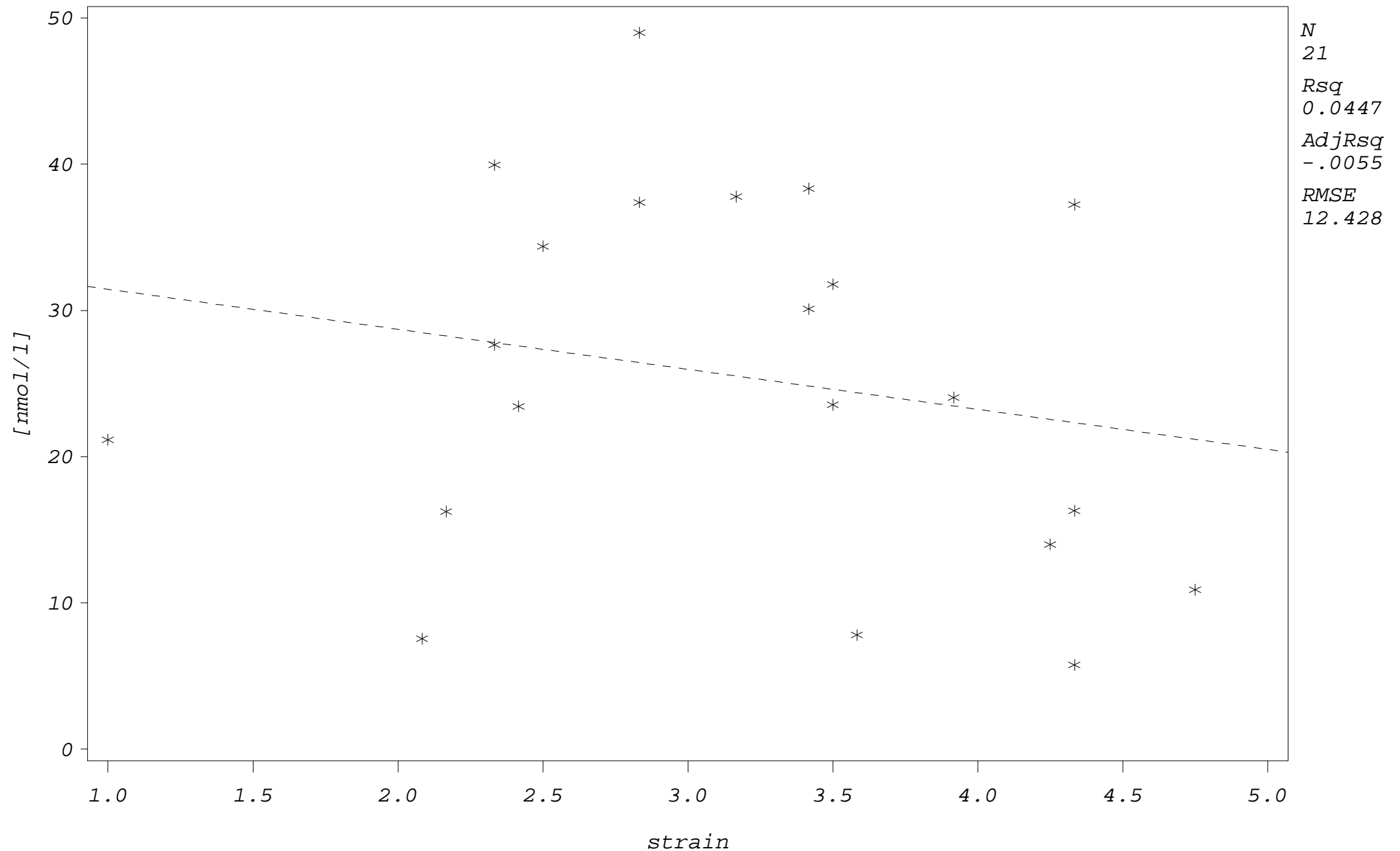
Study 1: cortisol levels * psychological strain (by gender)

gender=1 sampling occasion=1



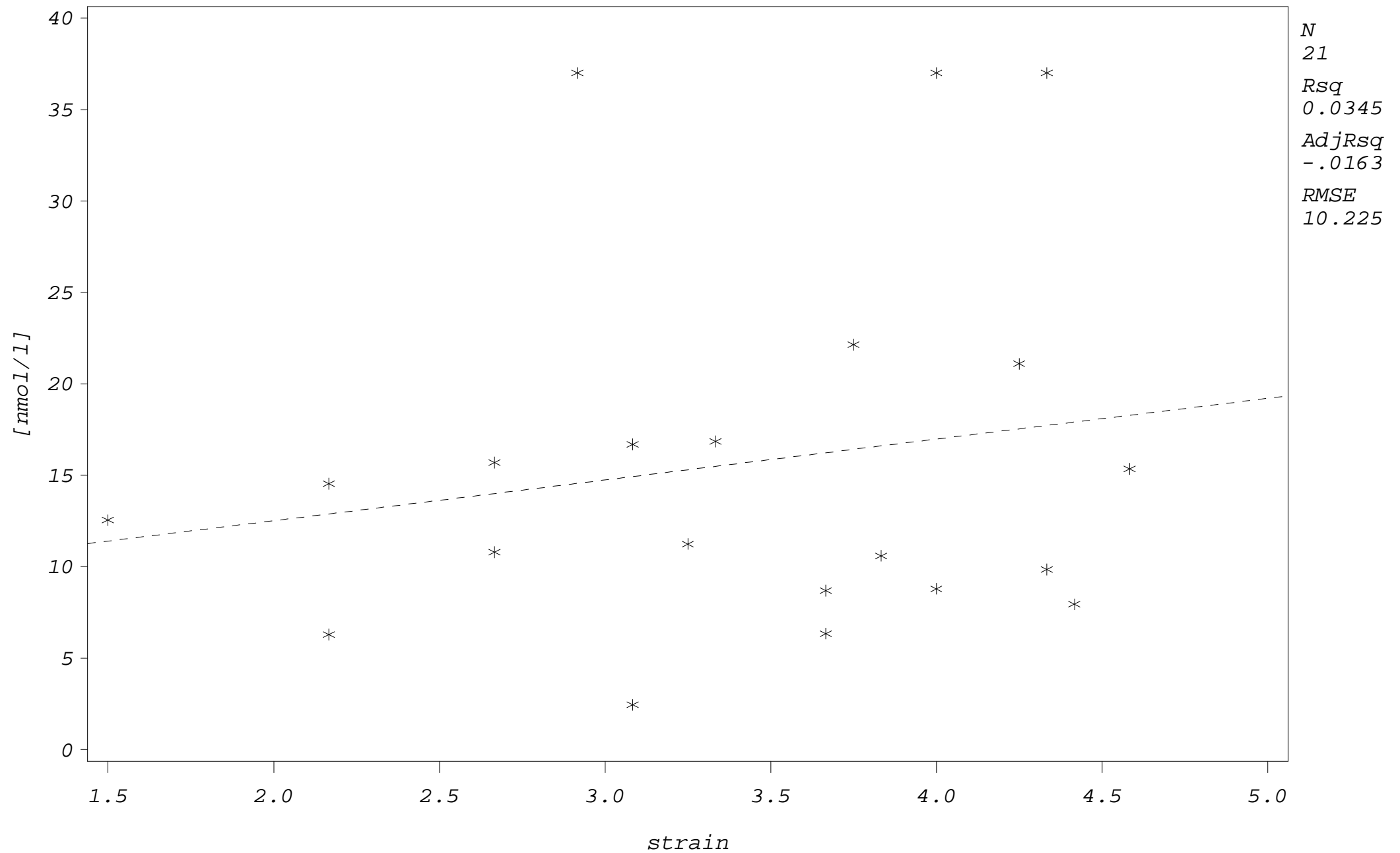
Study 1: cortisol levels * psychological strain (by gender)

gender=1 sampling occasion=2



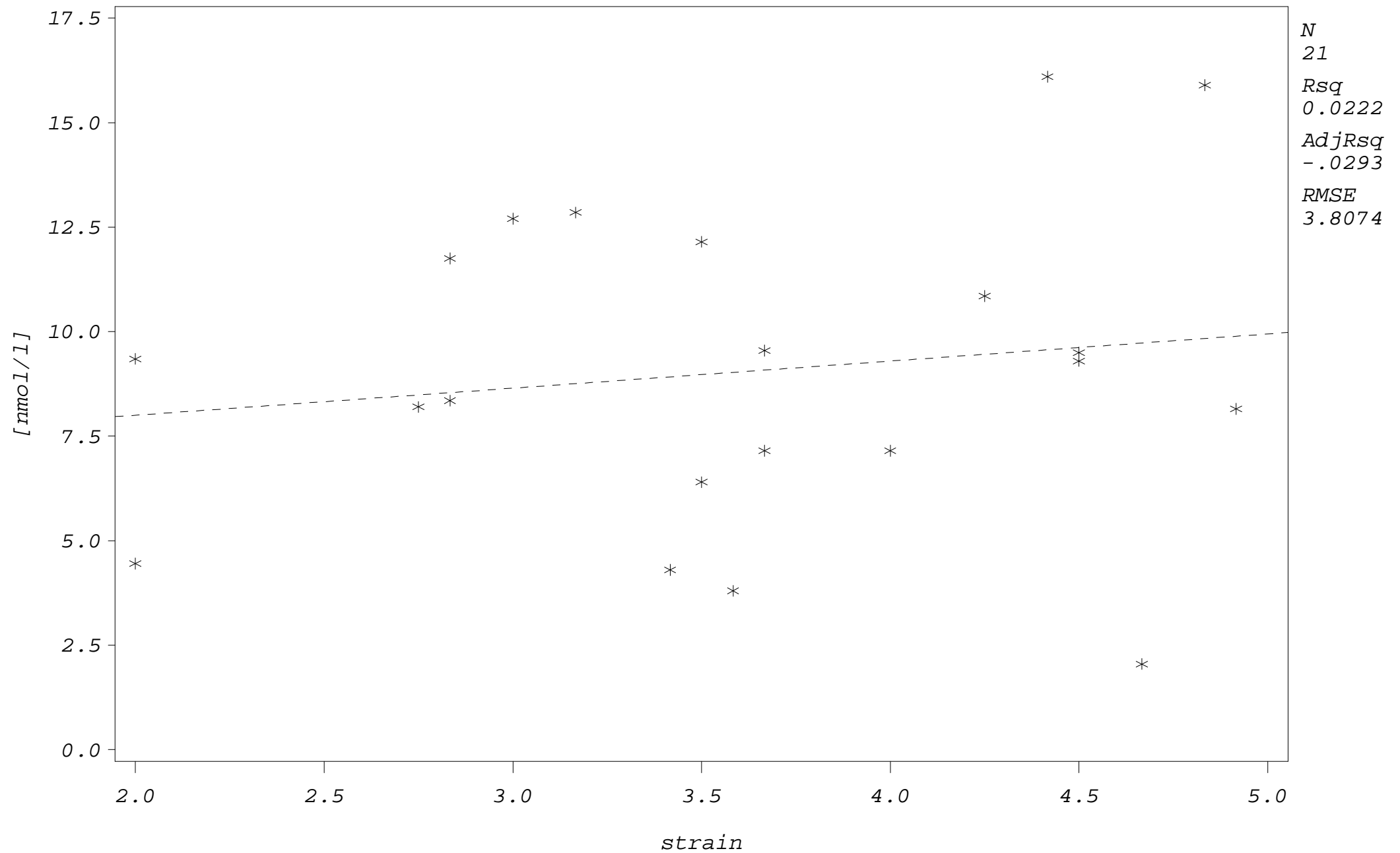
Study 1: cortisol levels * psychological strain (by gender)

gender=1 sampling occasion=3



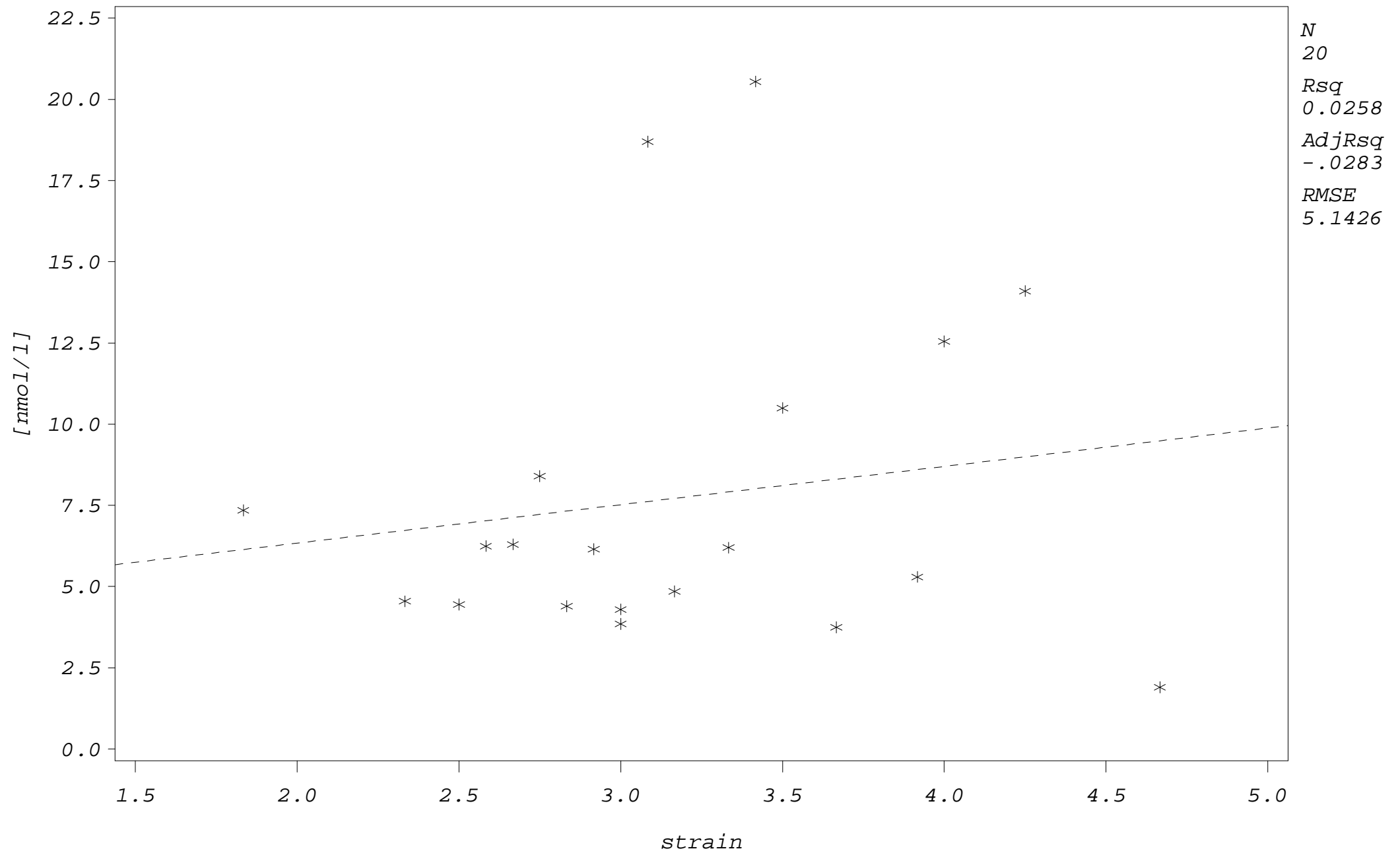
Study 1: cortisol levels * psychological strain (by gender)

gender=1 sampling occasion=4



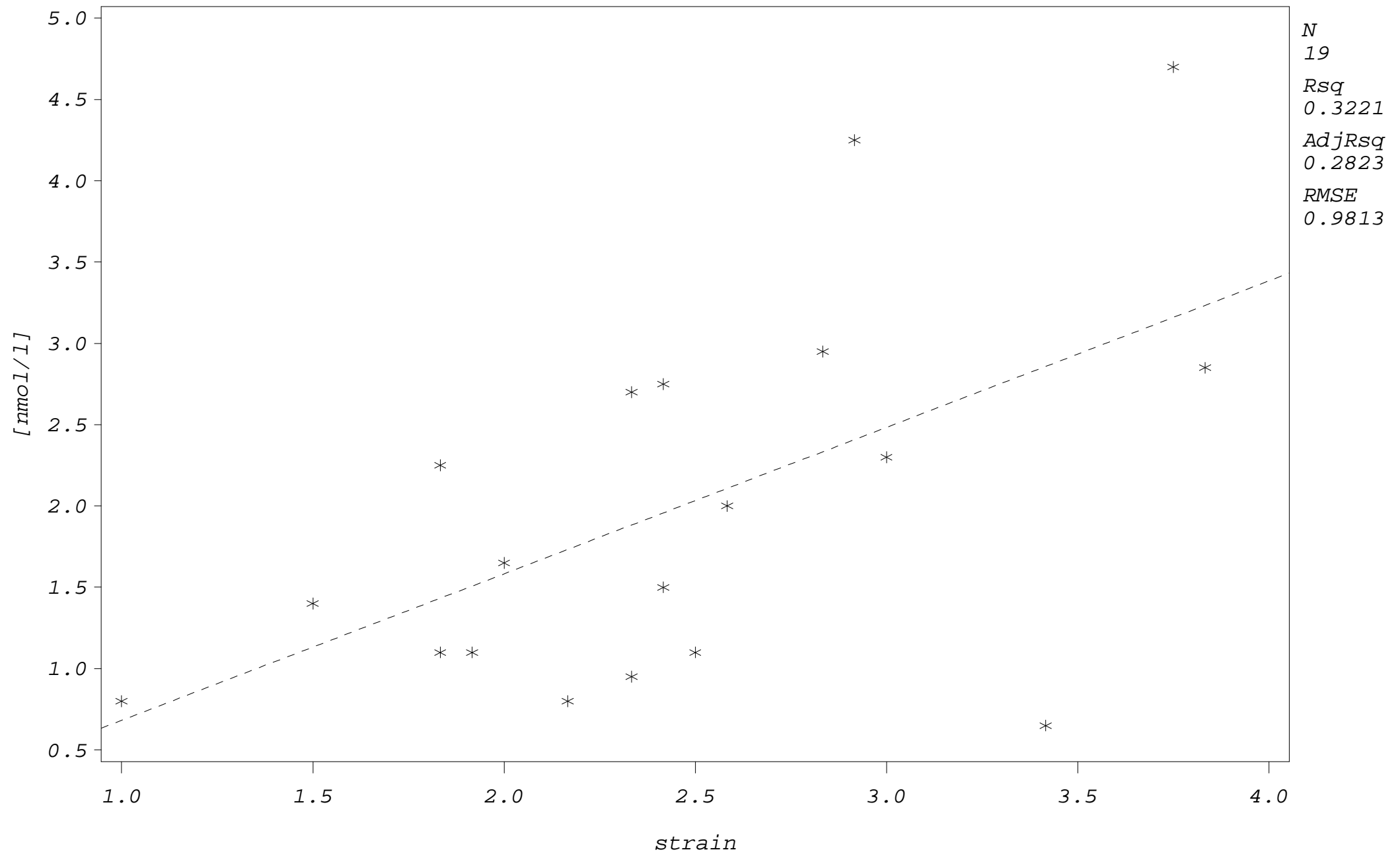
Study 1: cortisol levels * psychological strain (by gender)

gender=1 sampling occasion=5



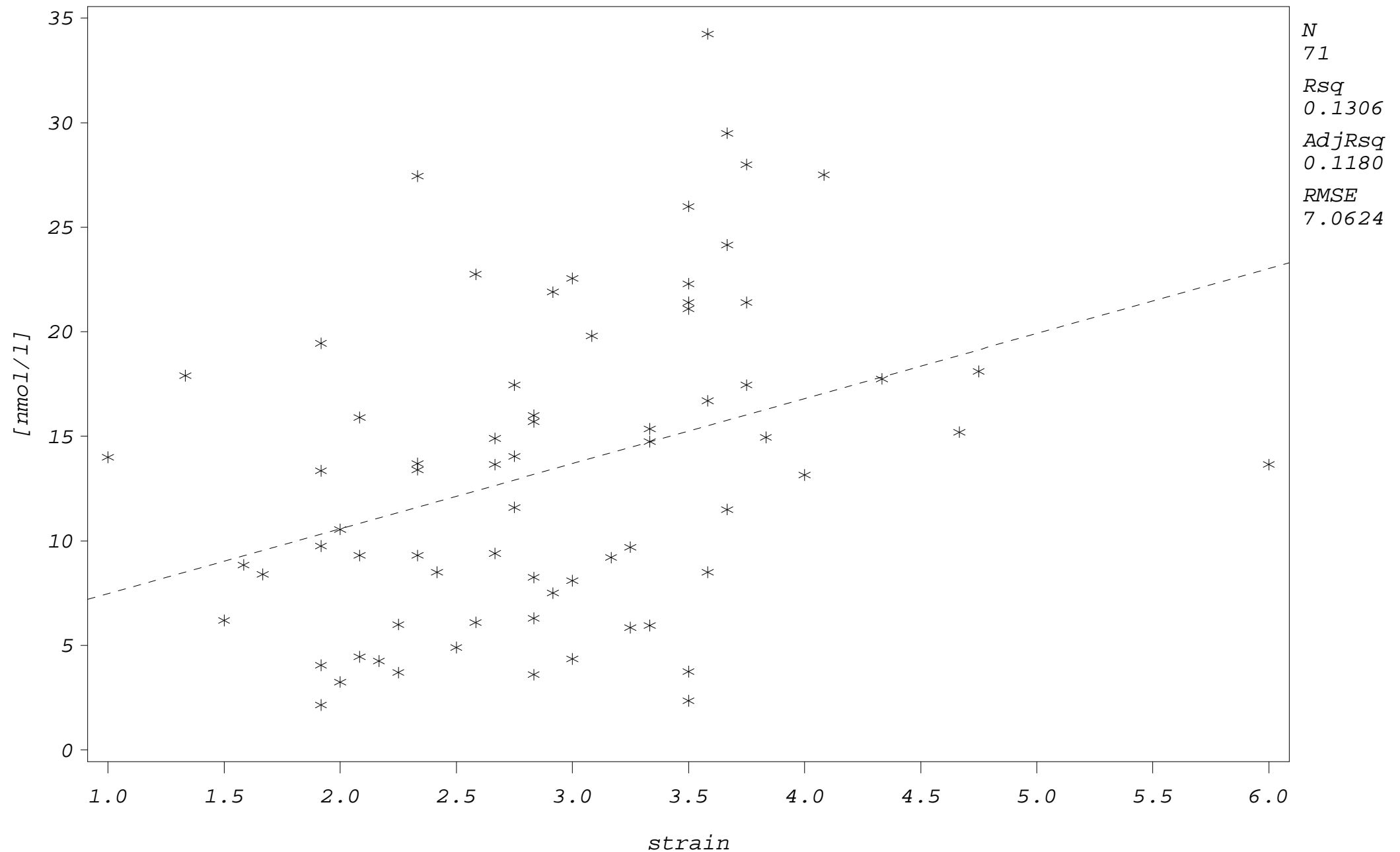
Study 1: cortisol levels * psychological strain (by gender)

gender=1 sampling occasion=6



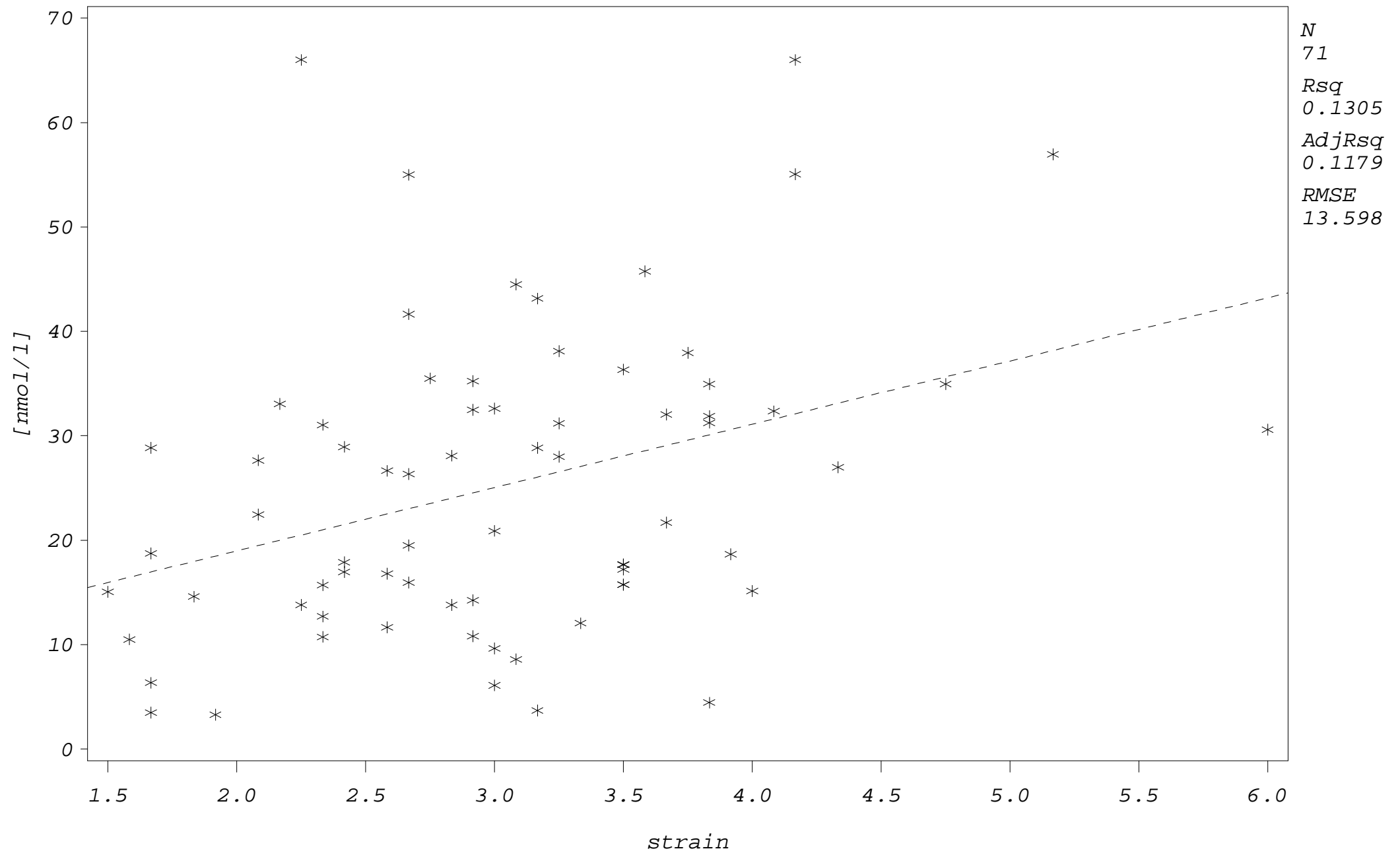
Study 1: cortisol levels * psychological strain (by gender)

gender=2 sampling occasion=1



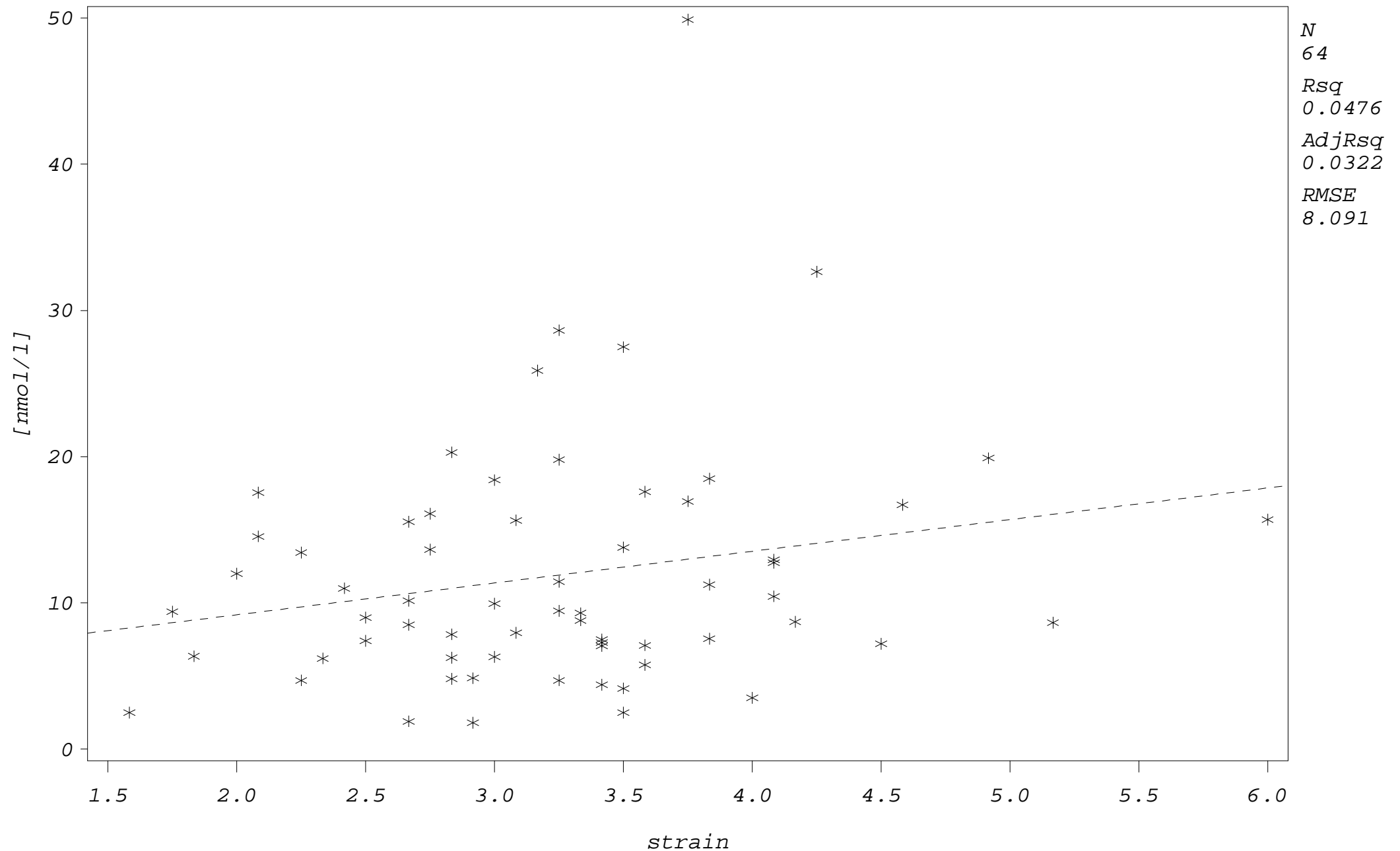
Study 1: cortisol levels * psychological strain (by gender)

gender=2 sampling occasion=2



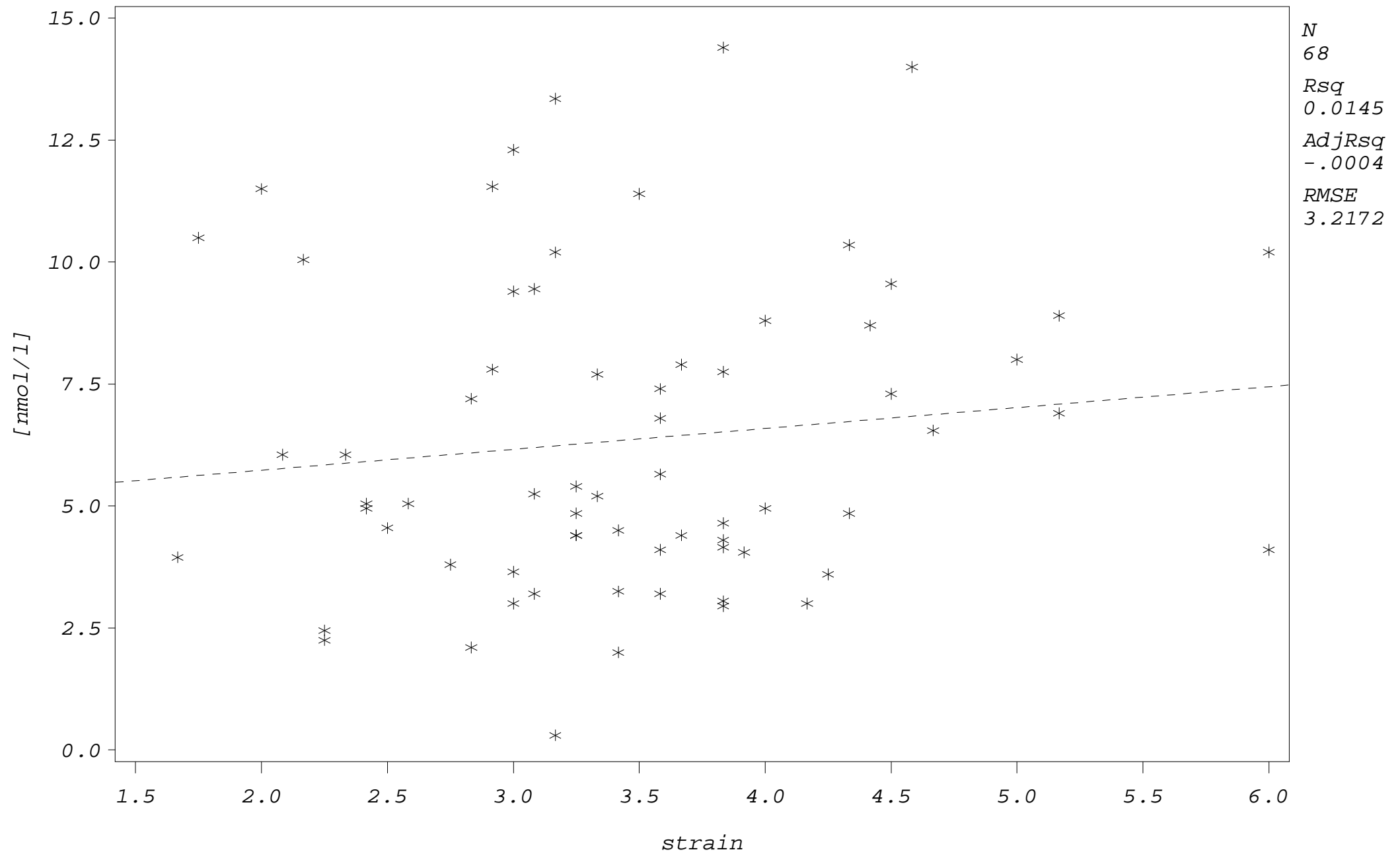
Study 1: cortisol levels * psychological strain (by gender)

gender=2 sampling occasion=3



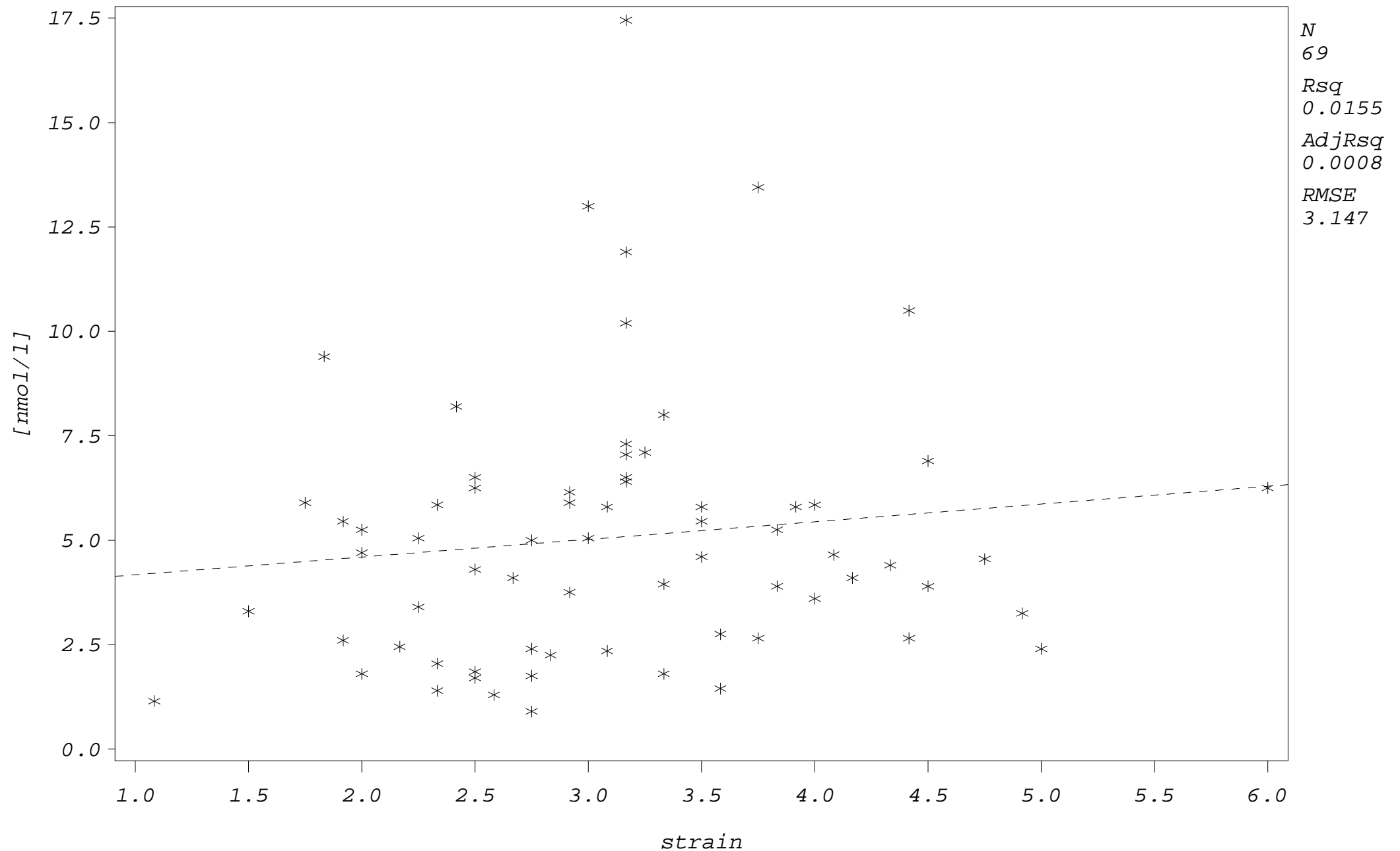
Study 1: cortisol levels * psychological strain (by gender)

gender=2 sampling occasion=4



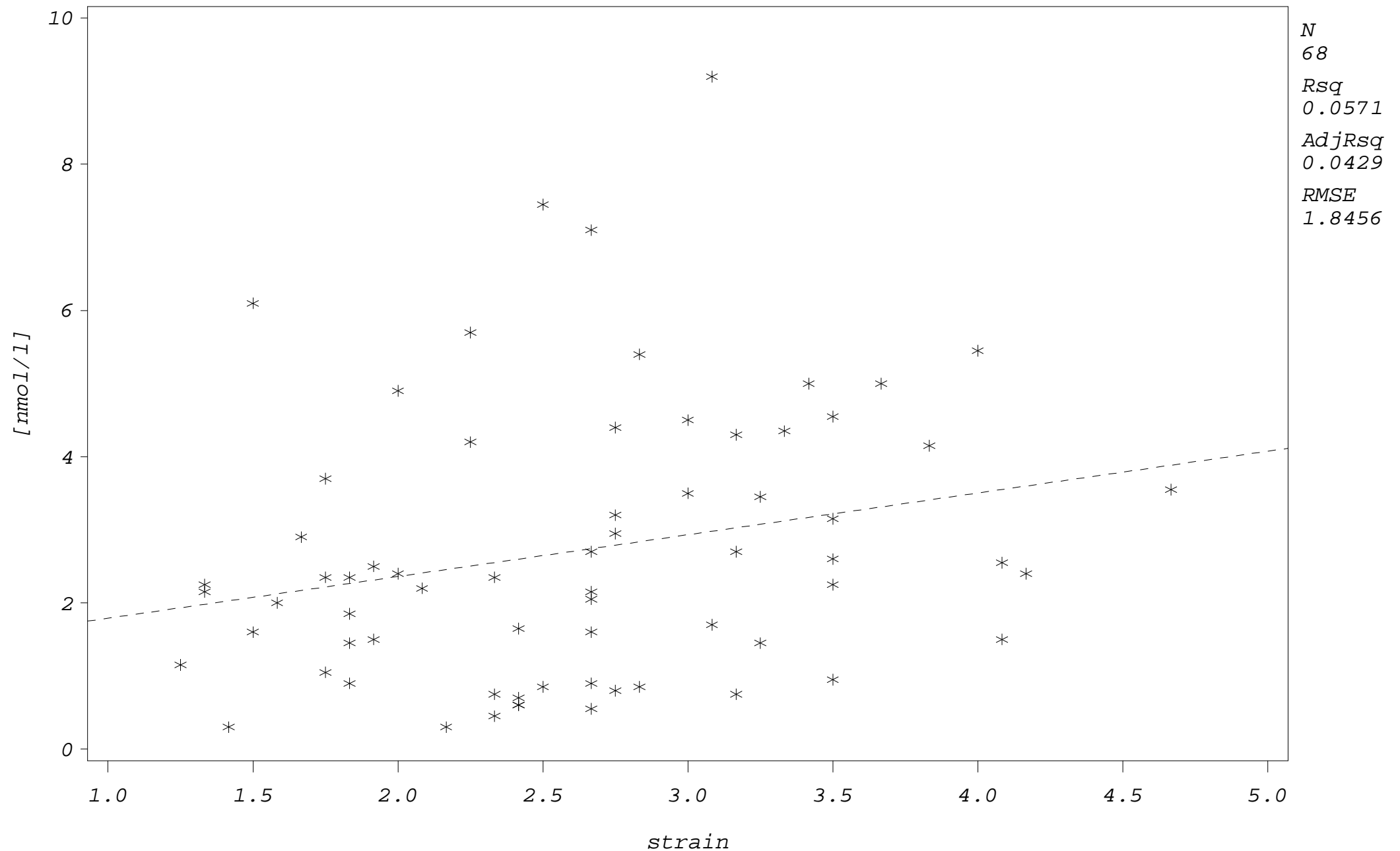
Study 1: cortisol levels * psychological strain (by gender)

gender=2 sampling occasion=5



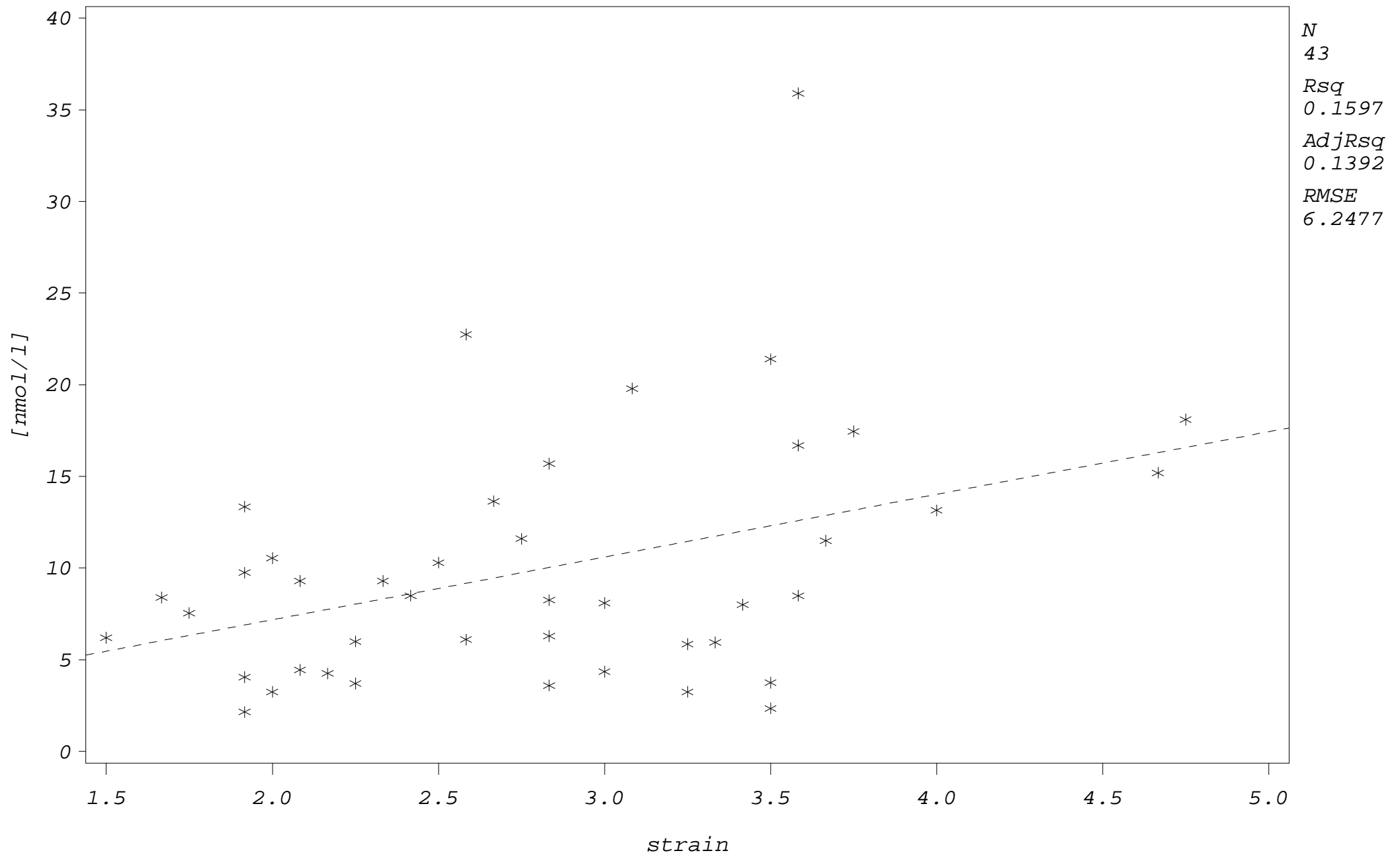
Study 1: cortisol levels * psychological strain (by gender)

gender=2 sampling occasion=6



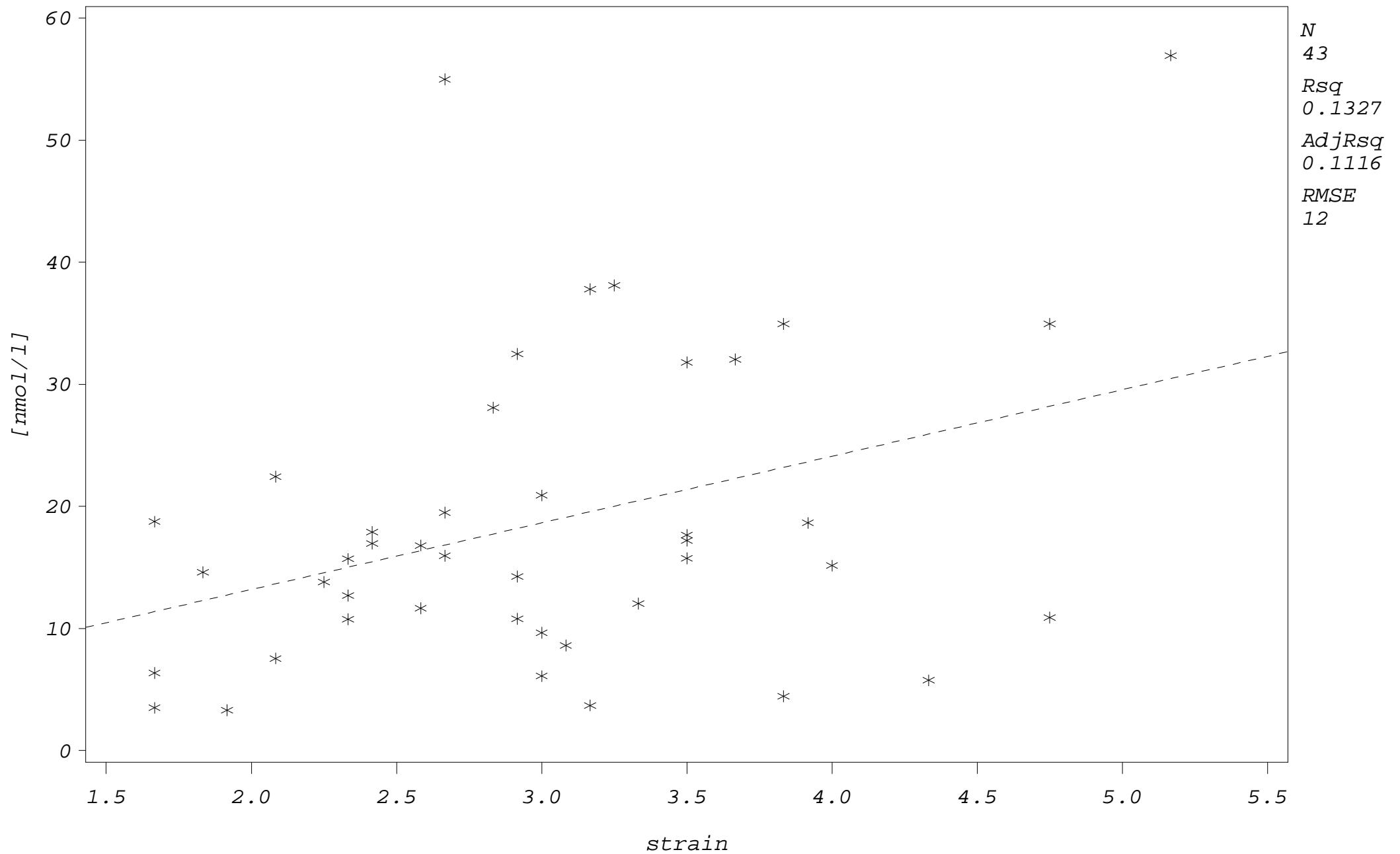
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=1 sampling occasion=1



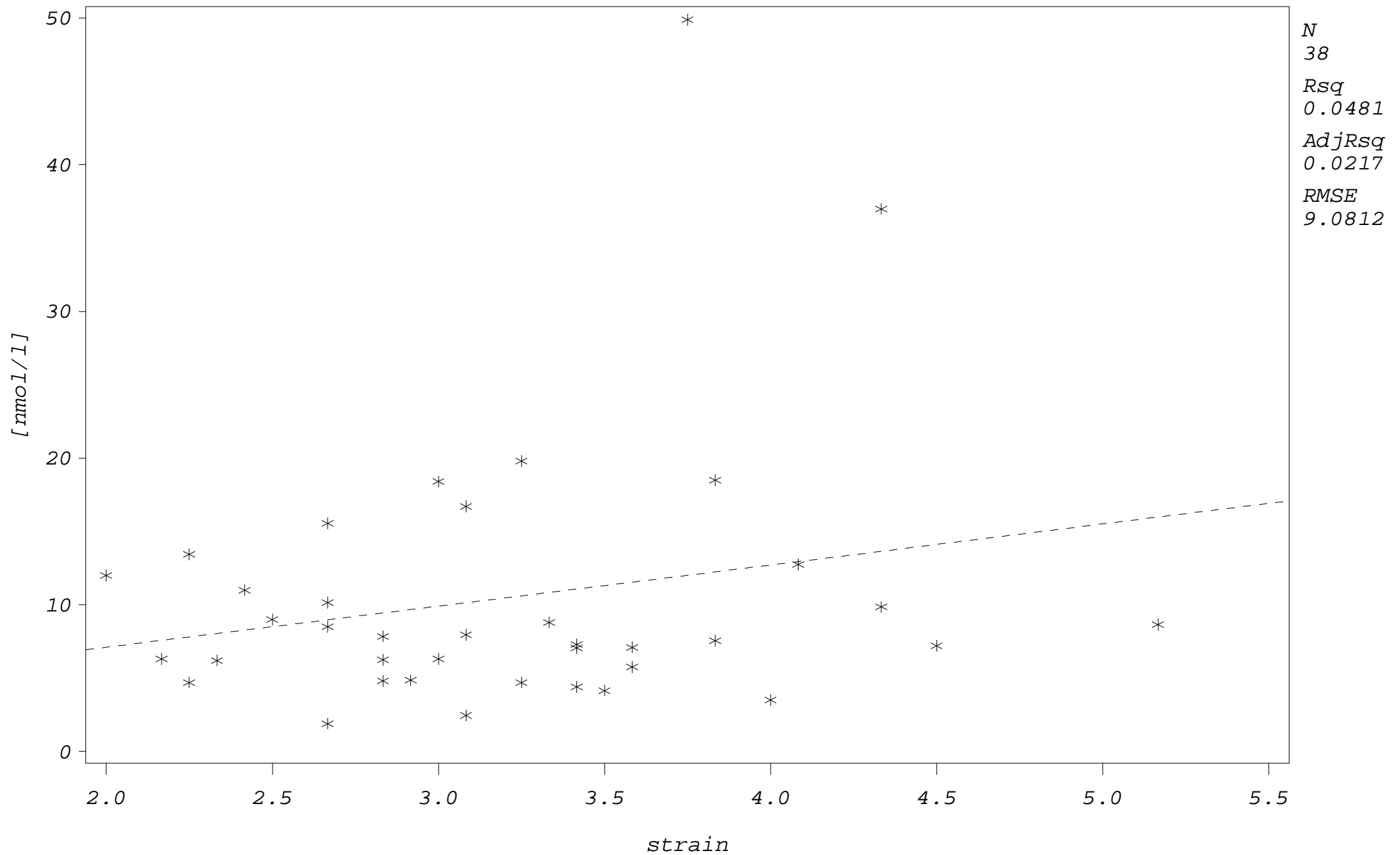
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=1 sampling occasion=2



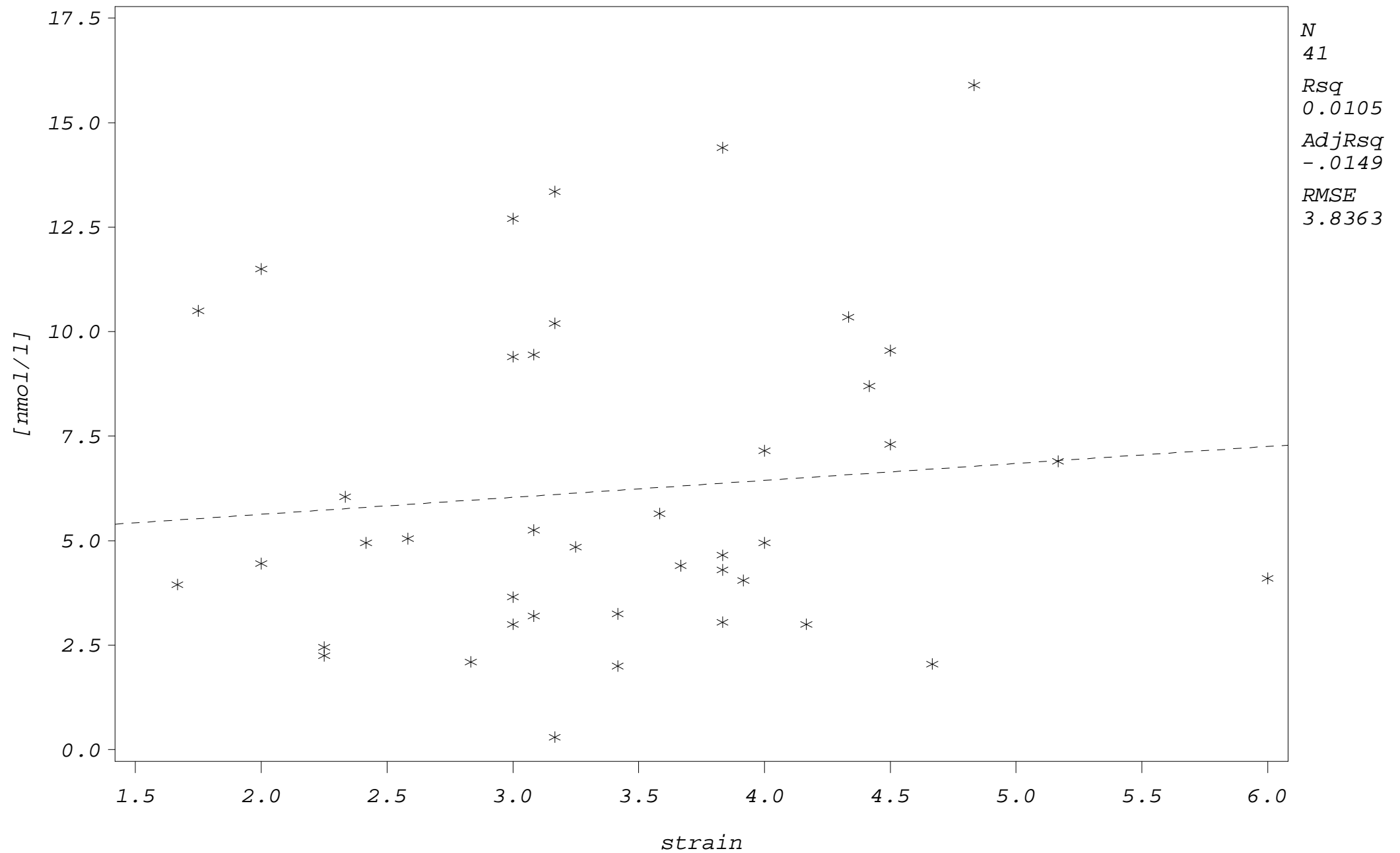
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=1 sampling occasion=3



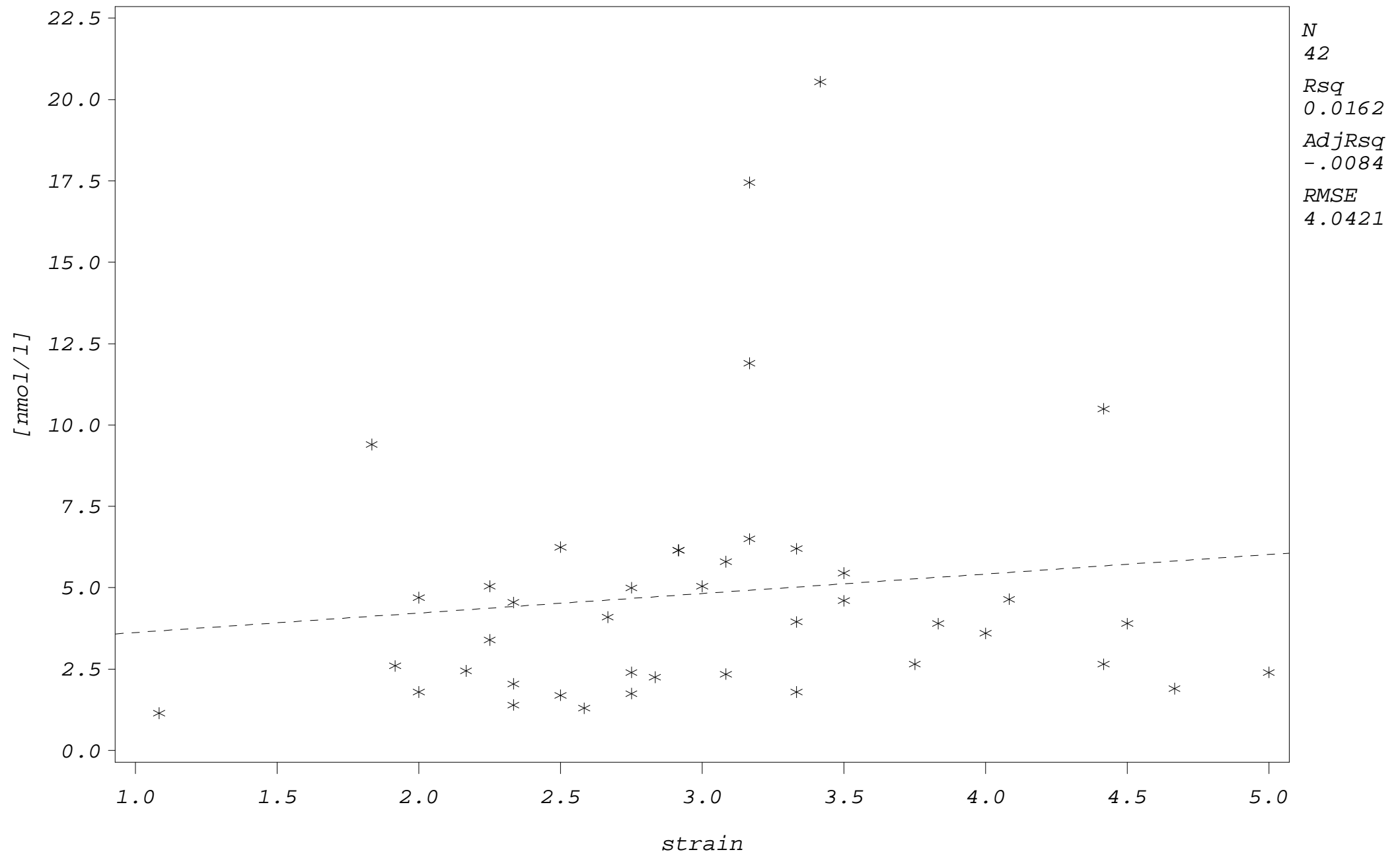
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=1 sampling occasion=4



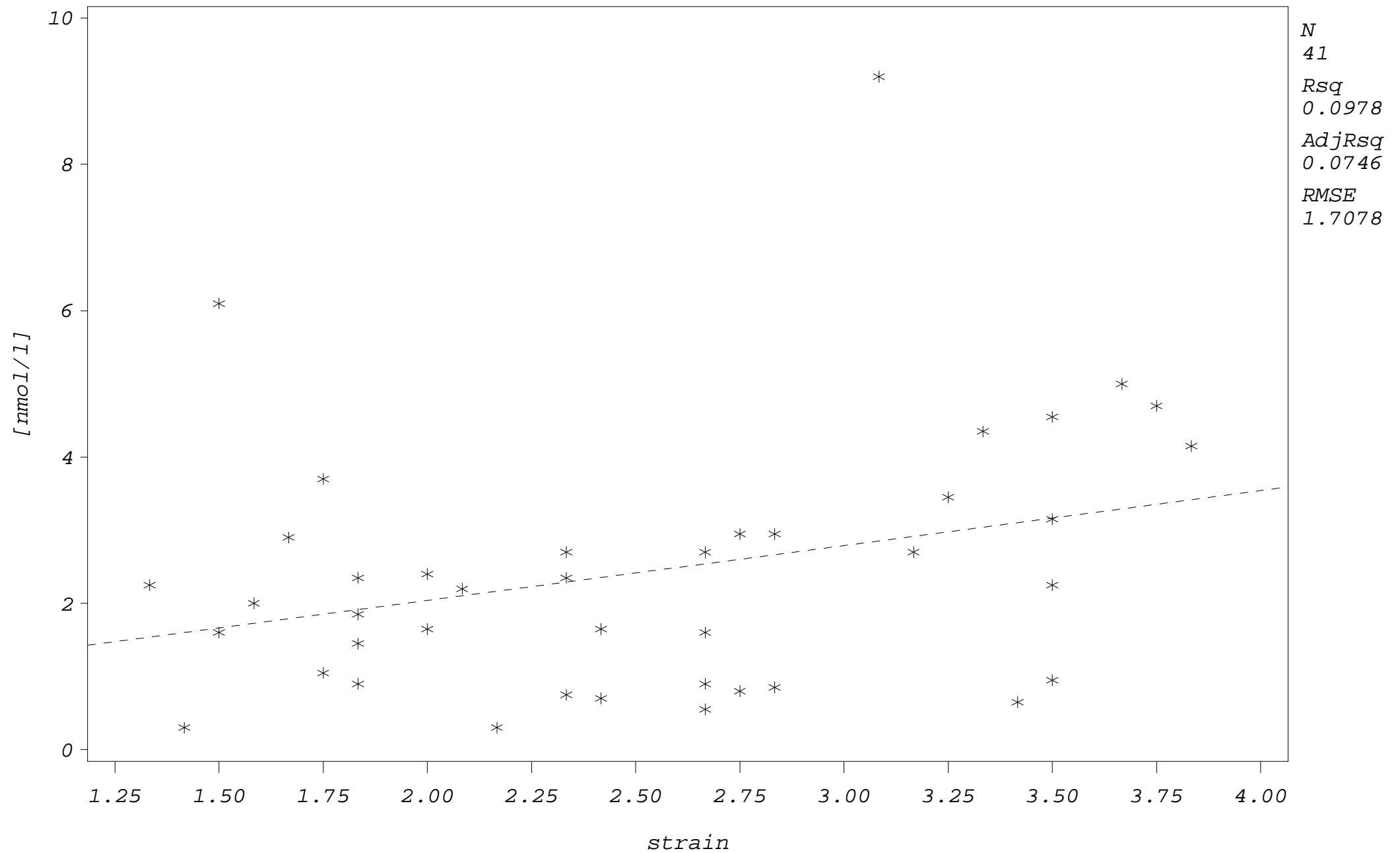
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=1 sampling occasion=5



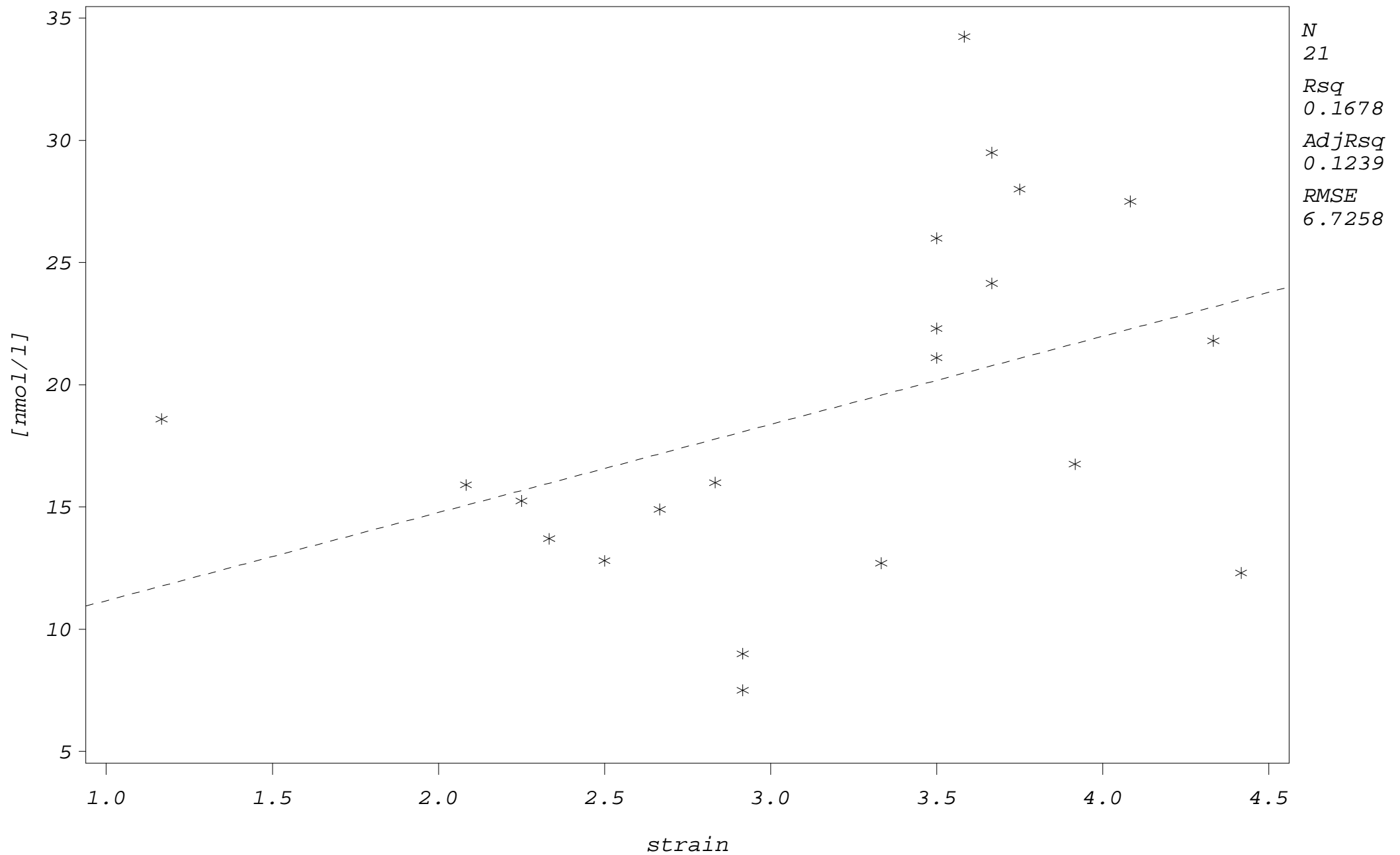
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=1 sampling occasion=6



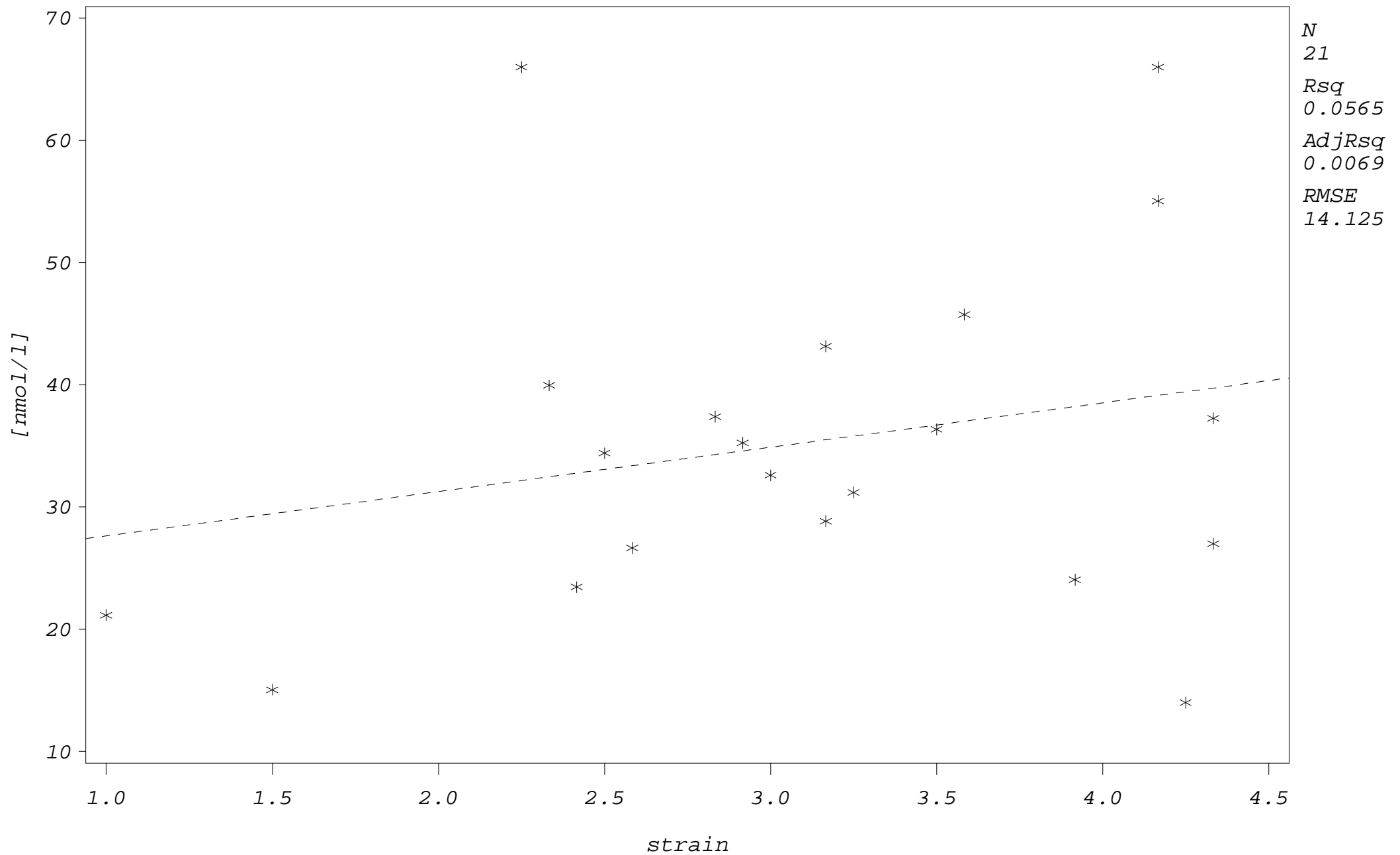
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=2 sampling occasion=1



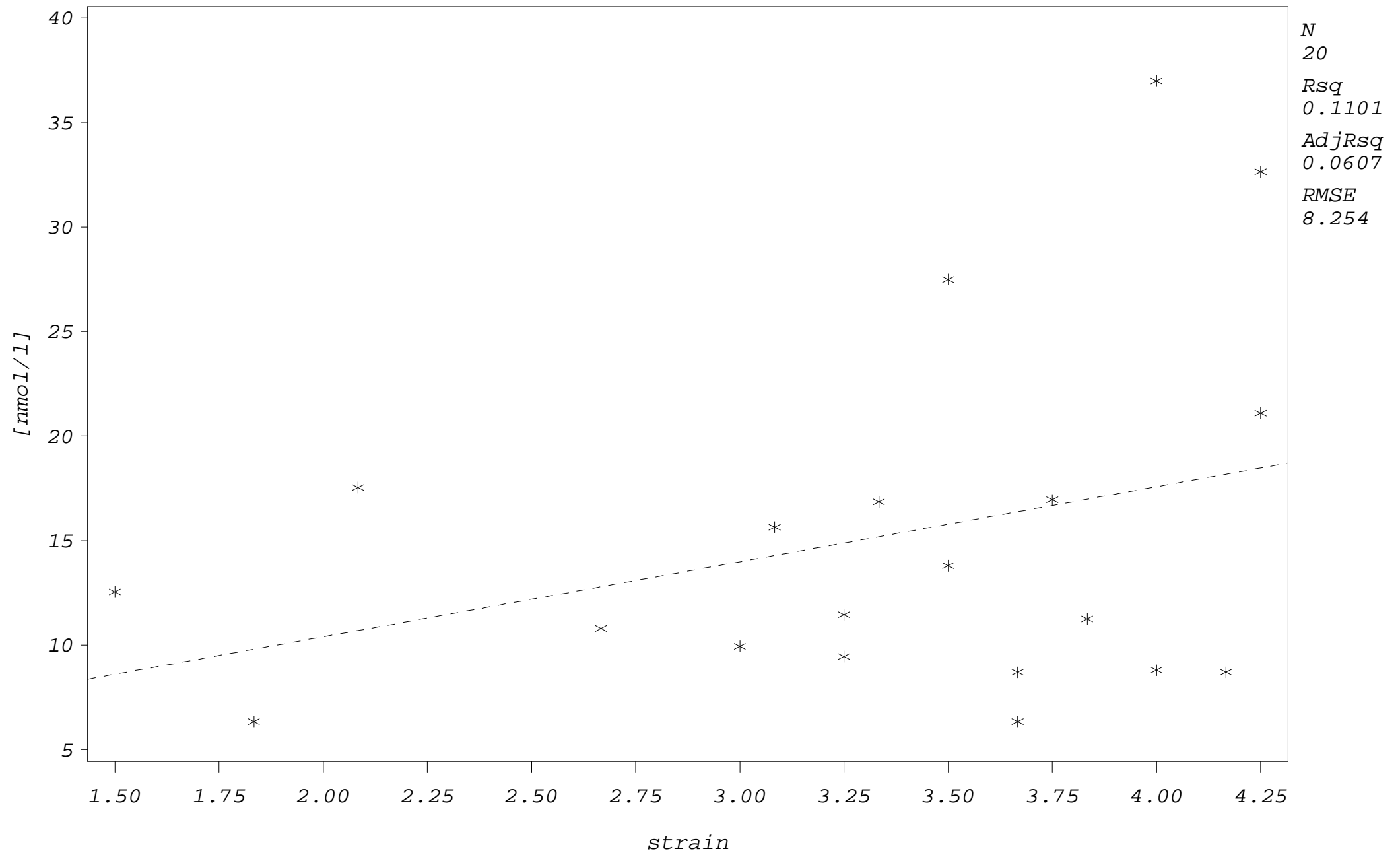
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=2 sampling occasion=2



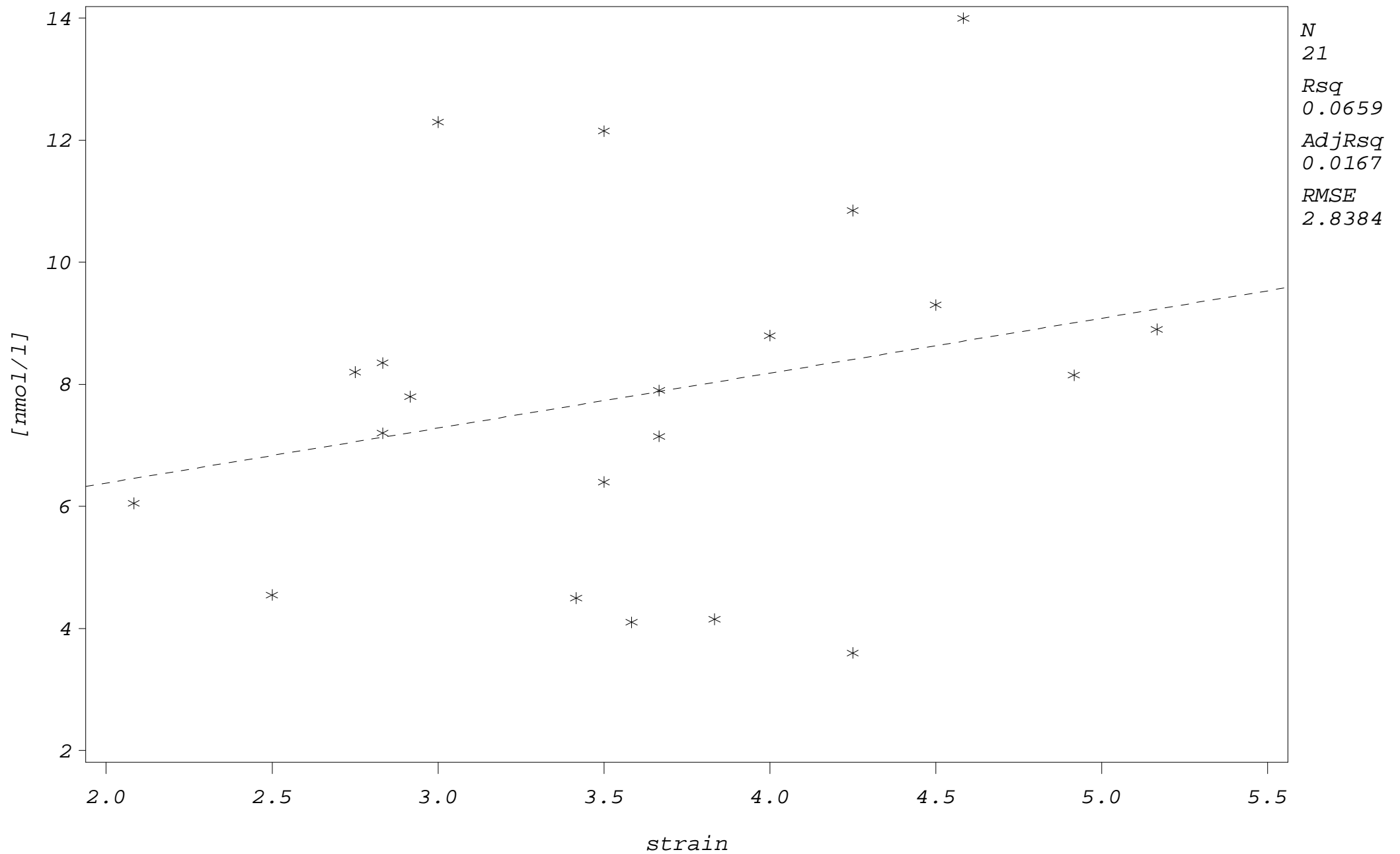
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=2 sampling occasion=3



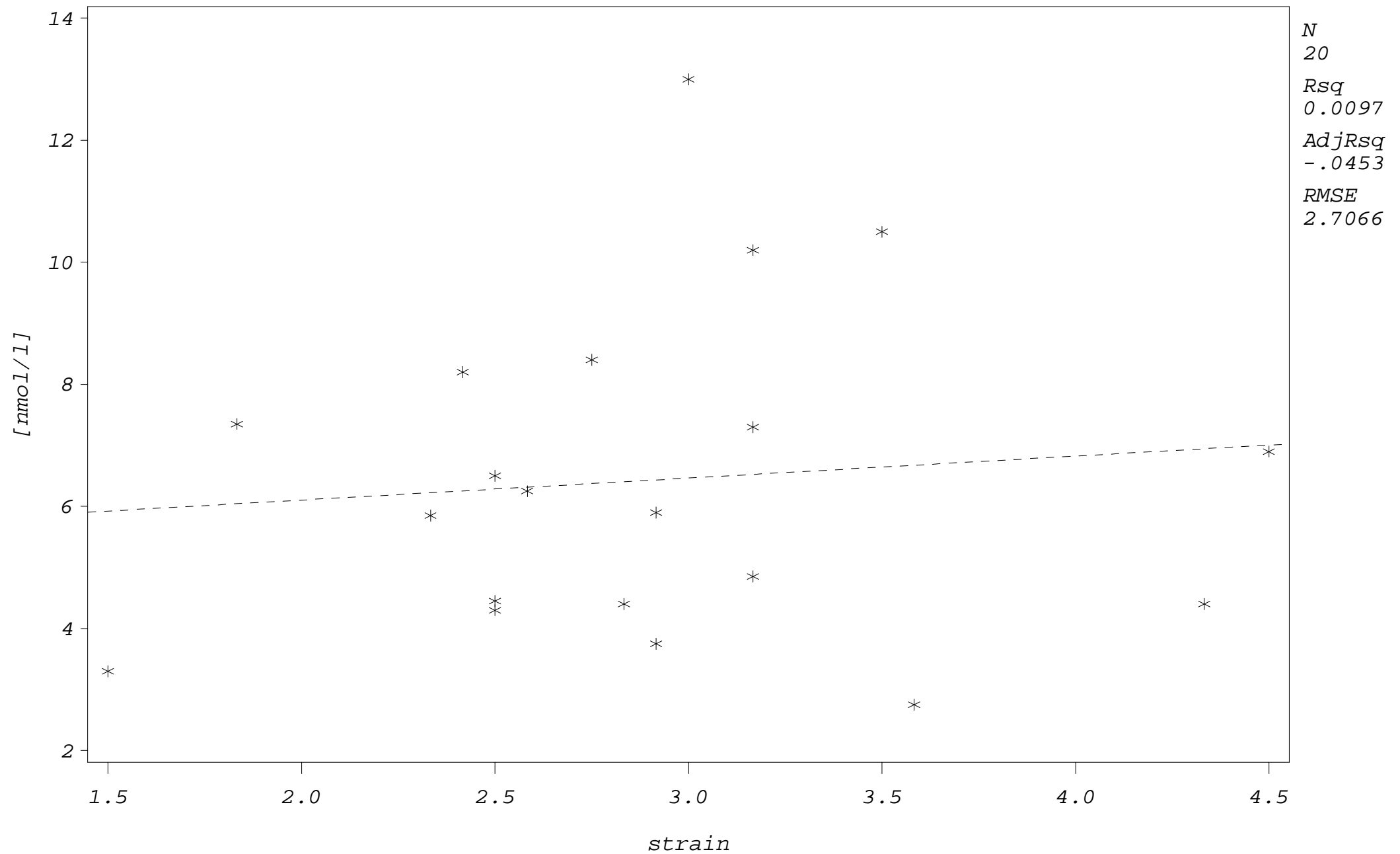
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=2 sampling occasion=4



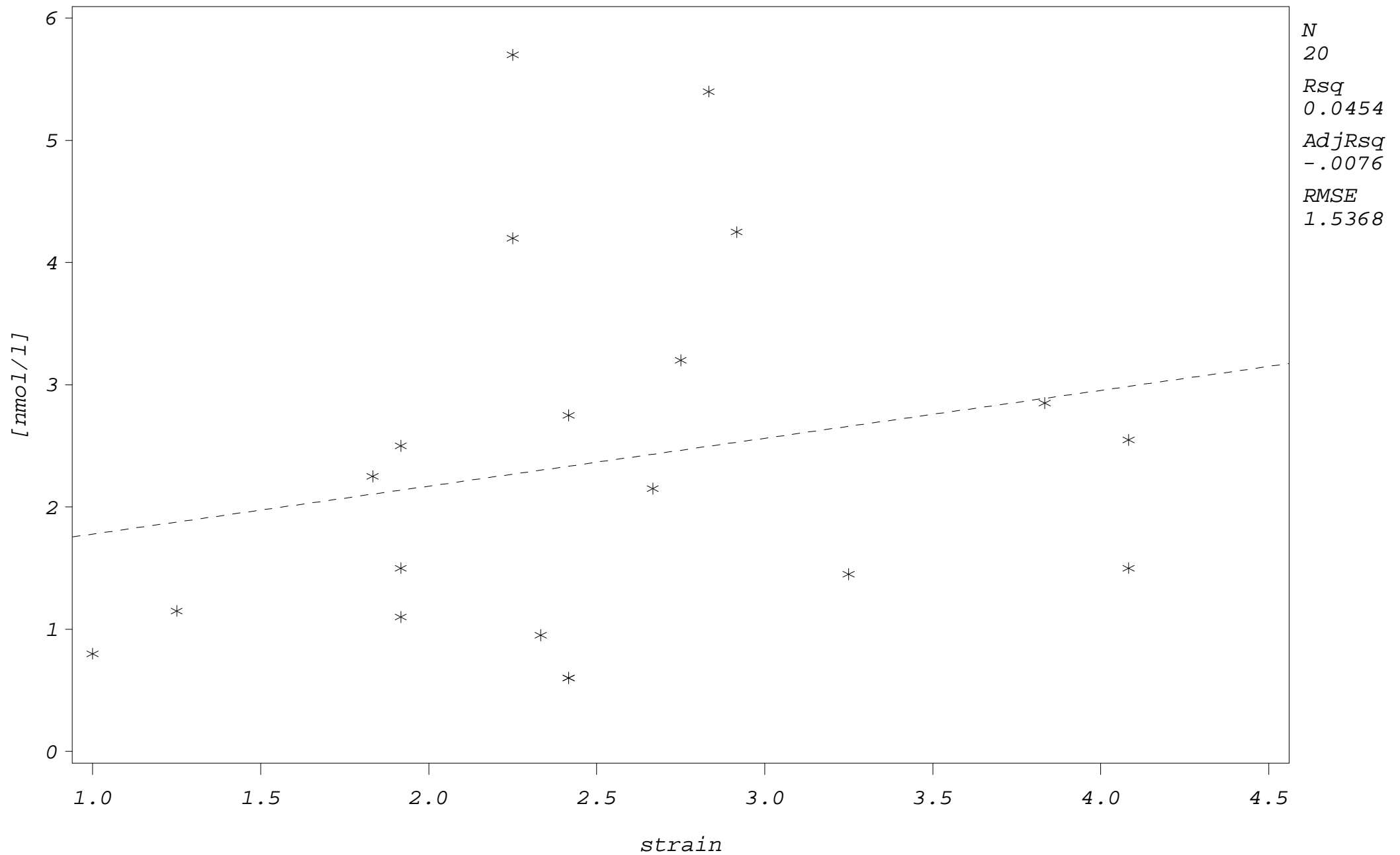
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=2 sampling occasion=5



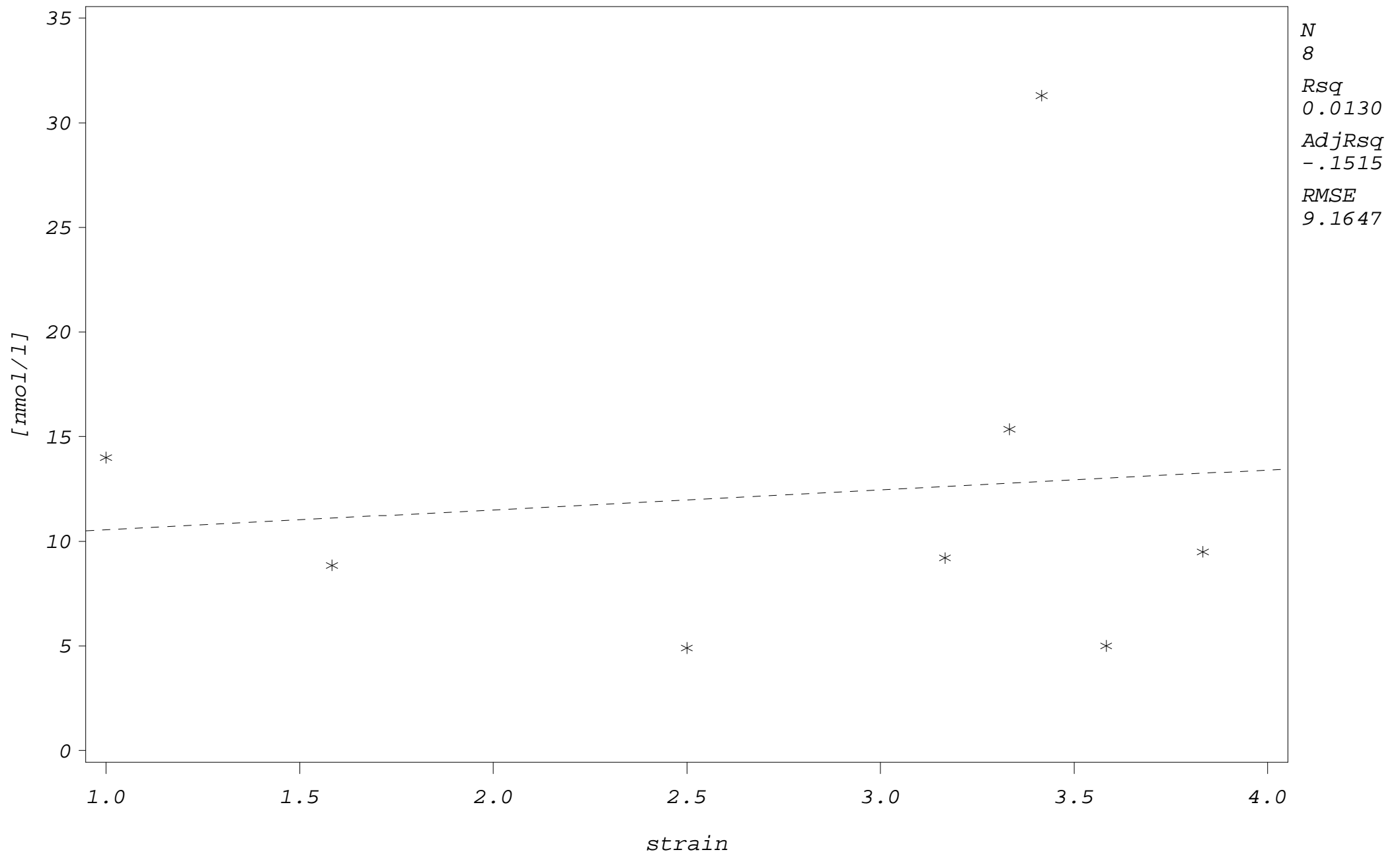
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=2 sampling occasion=6



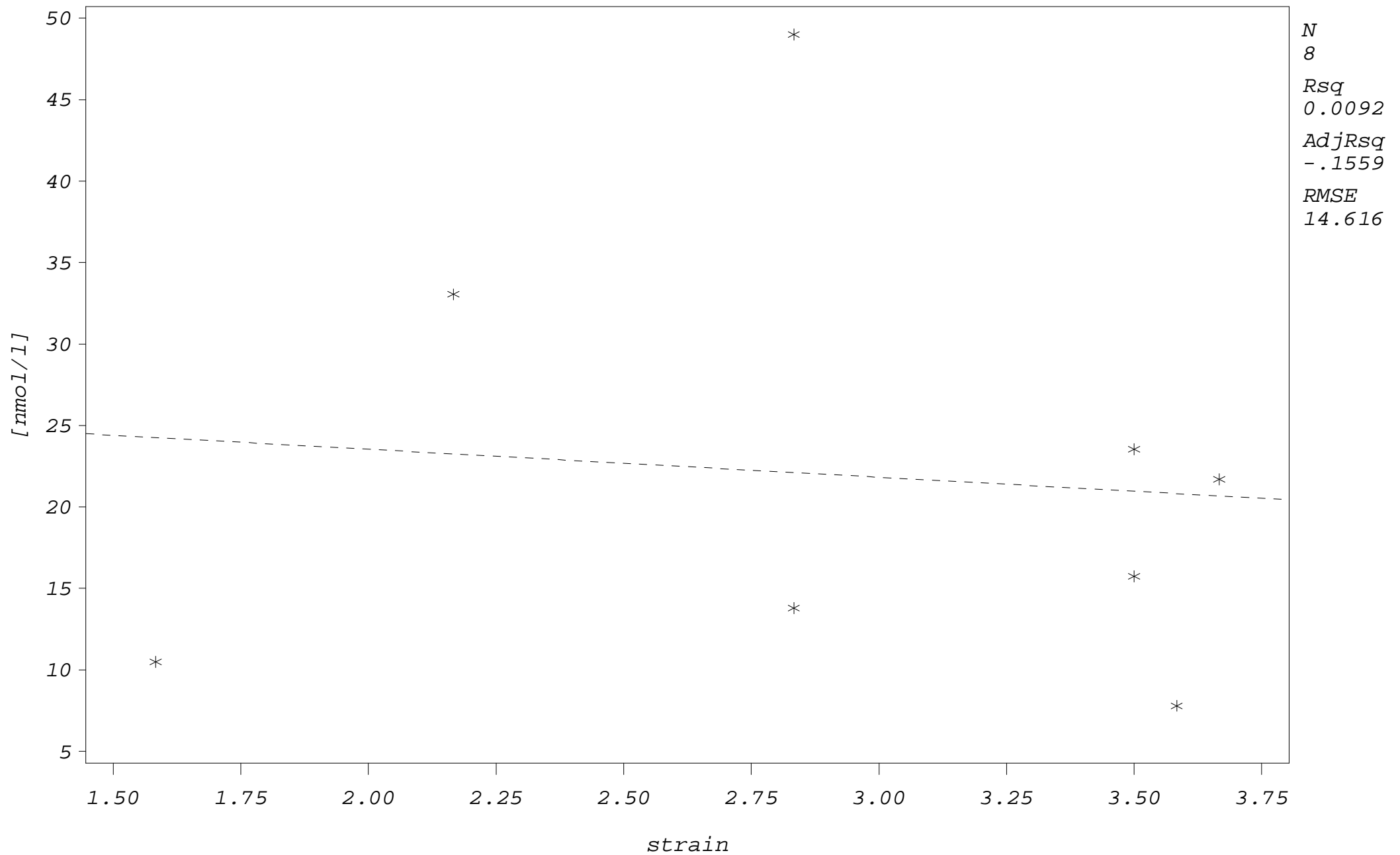
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=3 sampling occasion=1



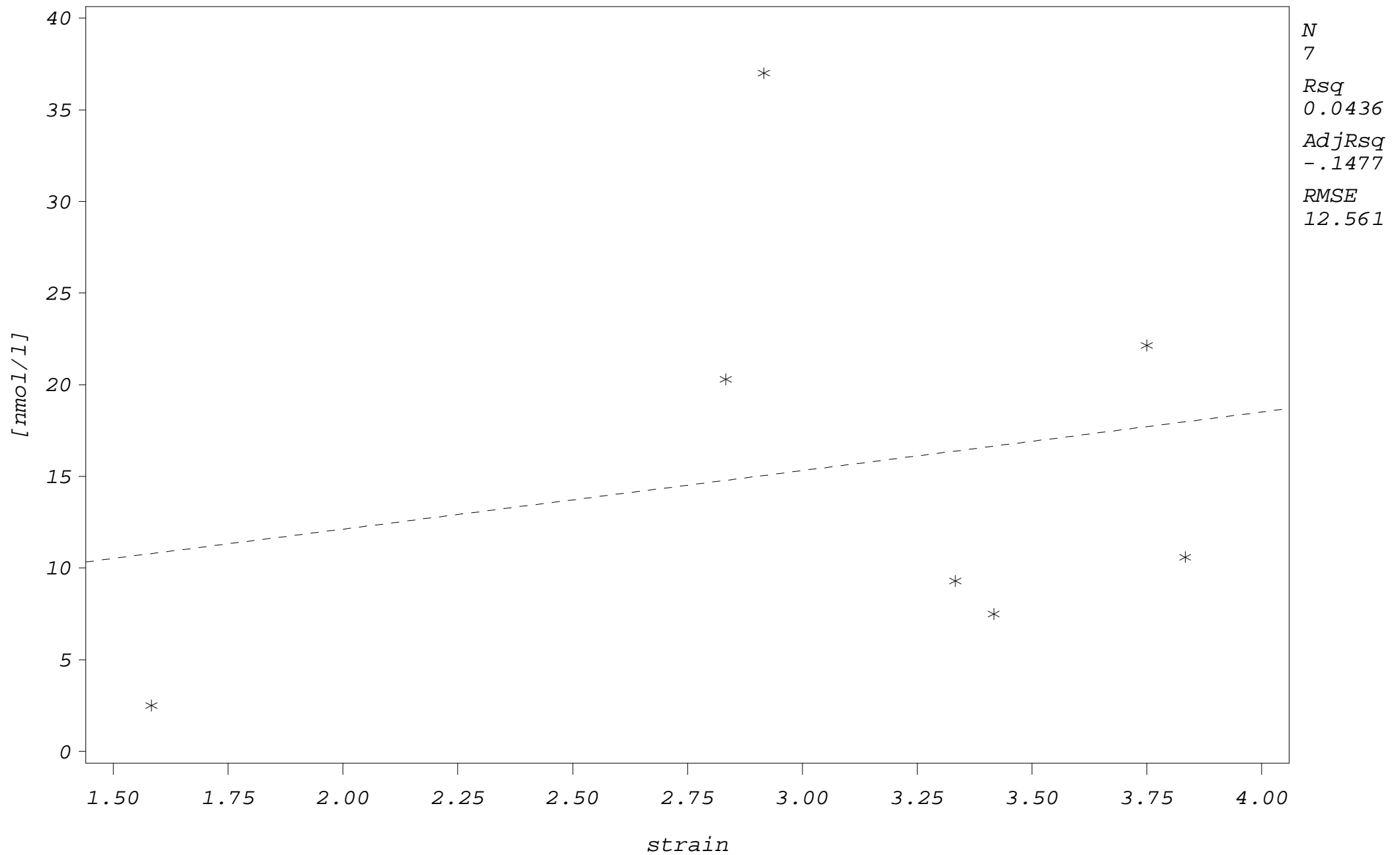
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=3 sampling occasion=2



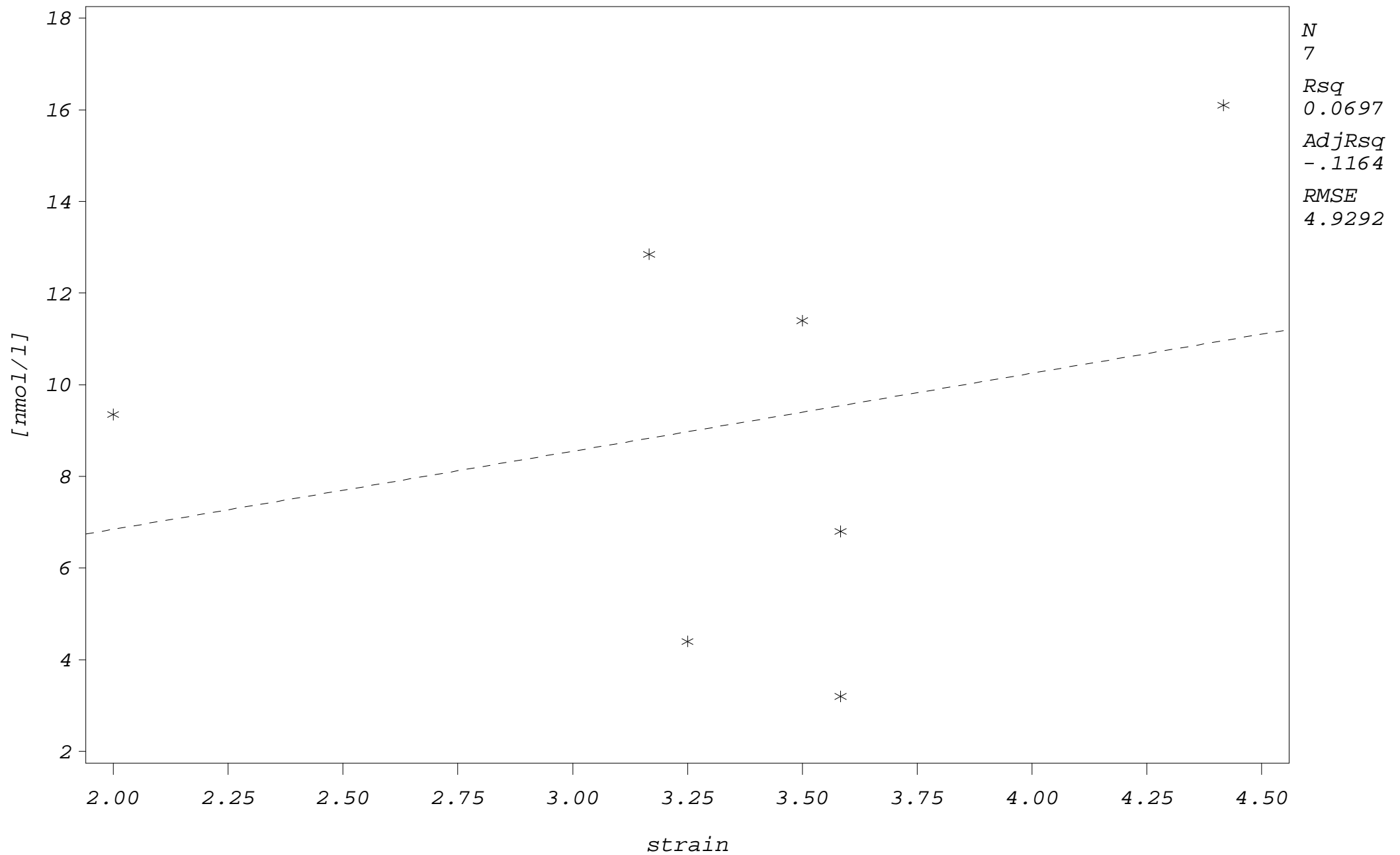
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=3 sampling occasion=3



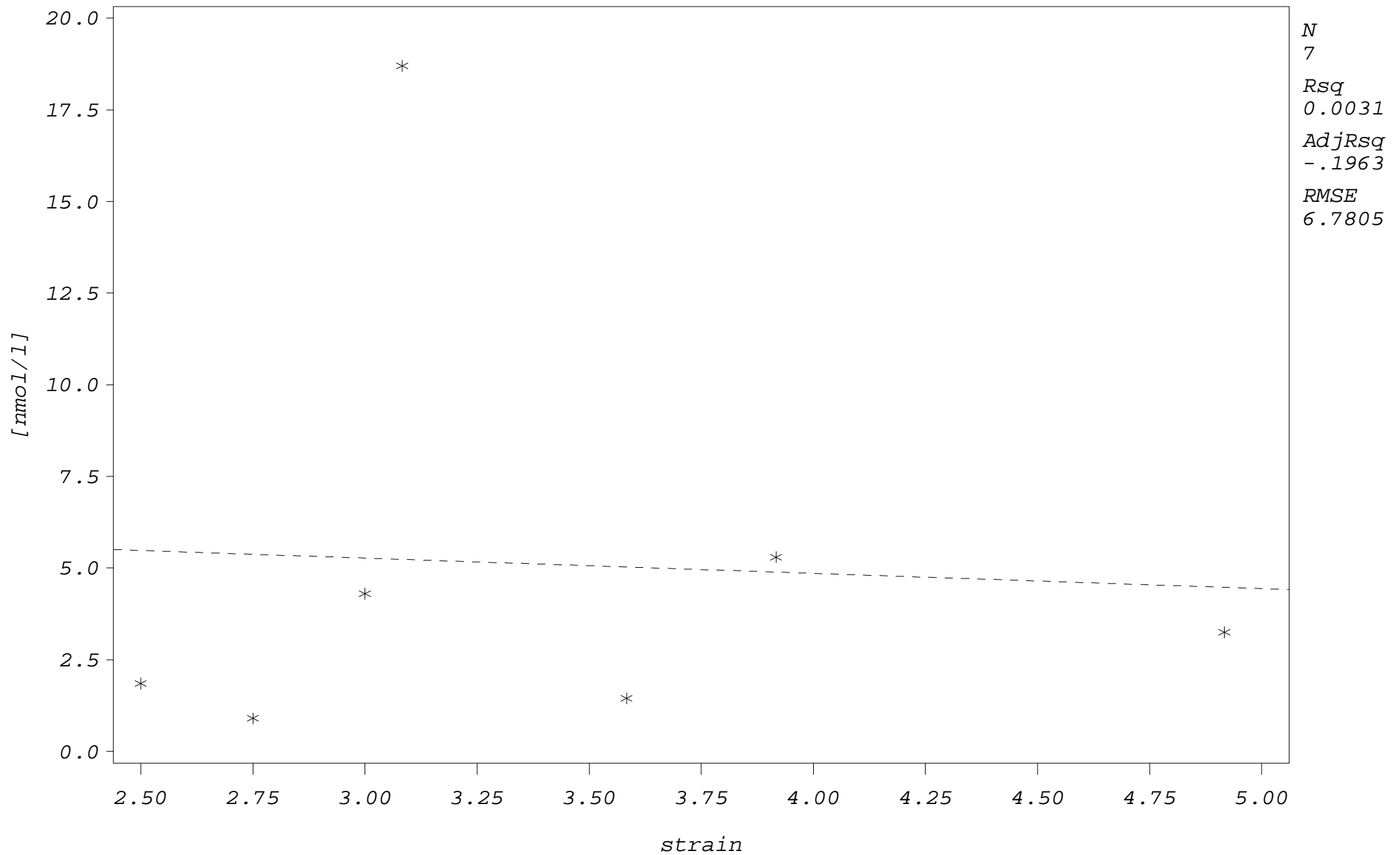
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=3 sampling occasion=4



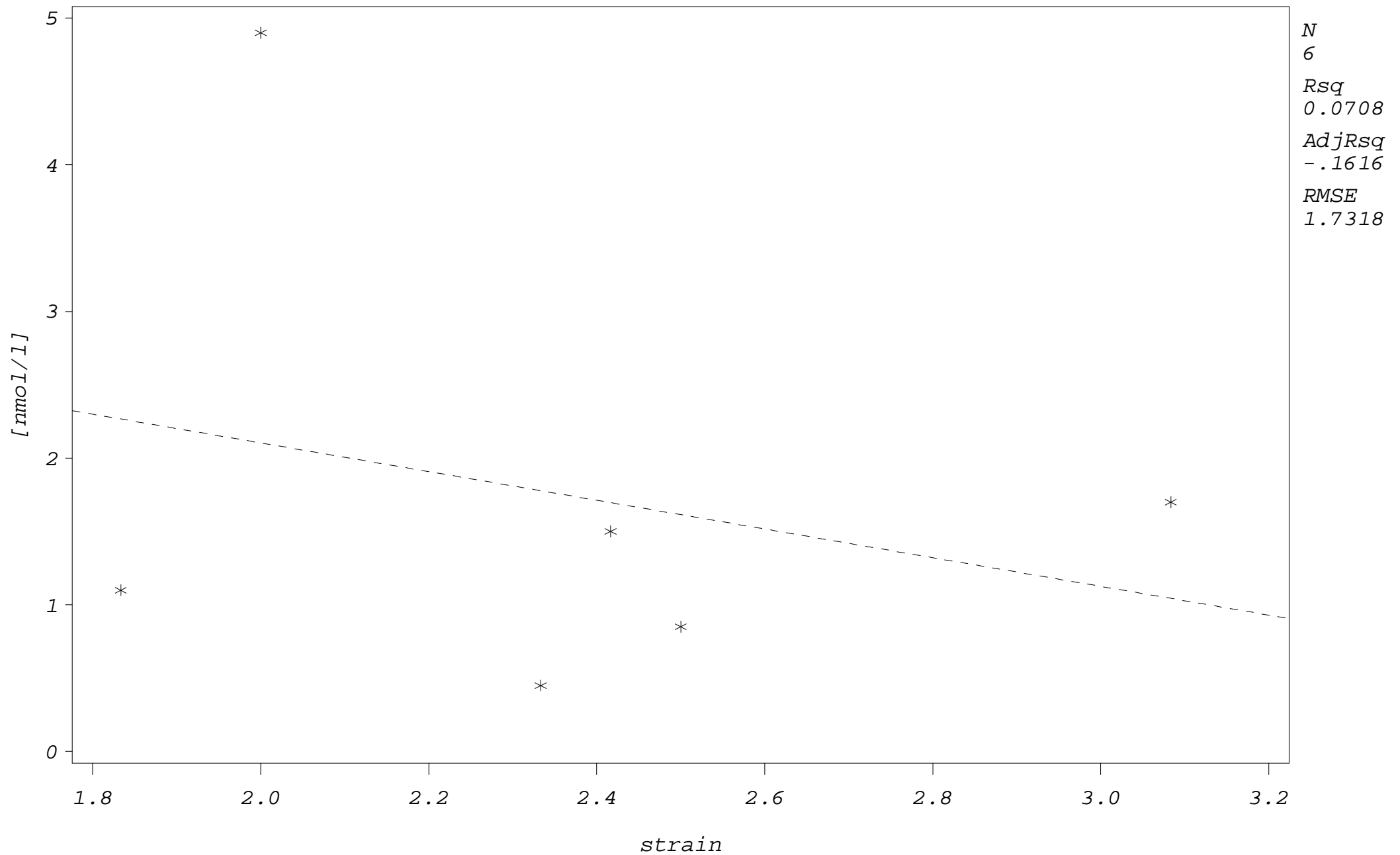
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=3 sampling occasion=5



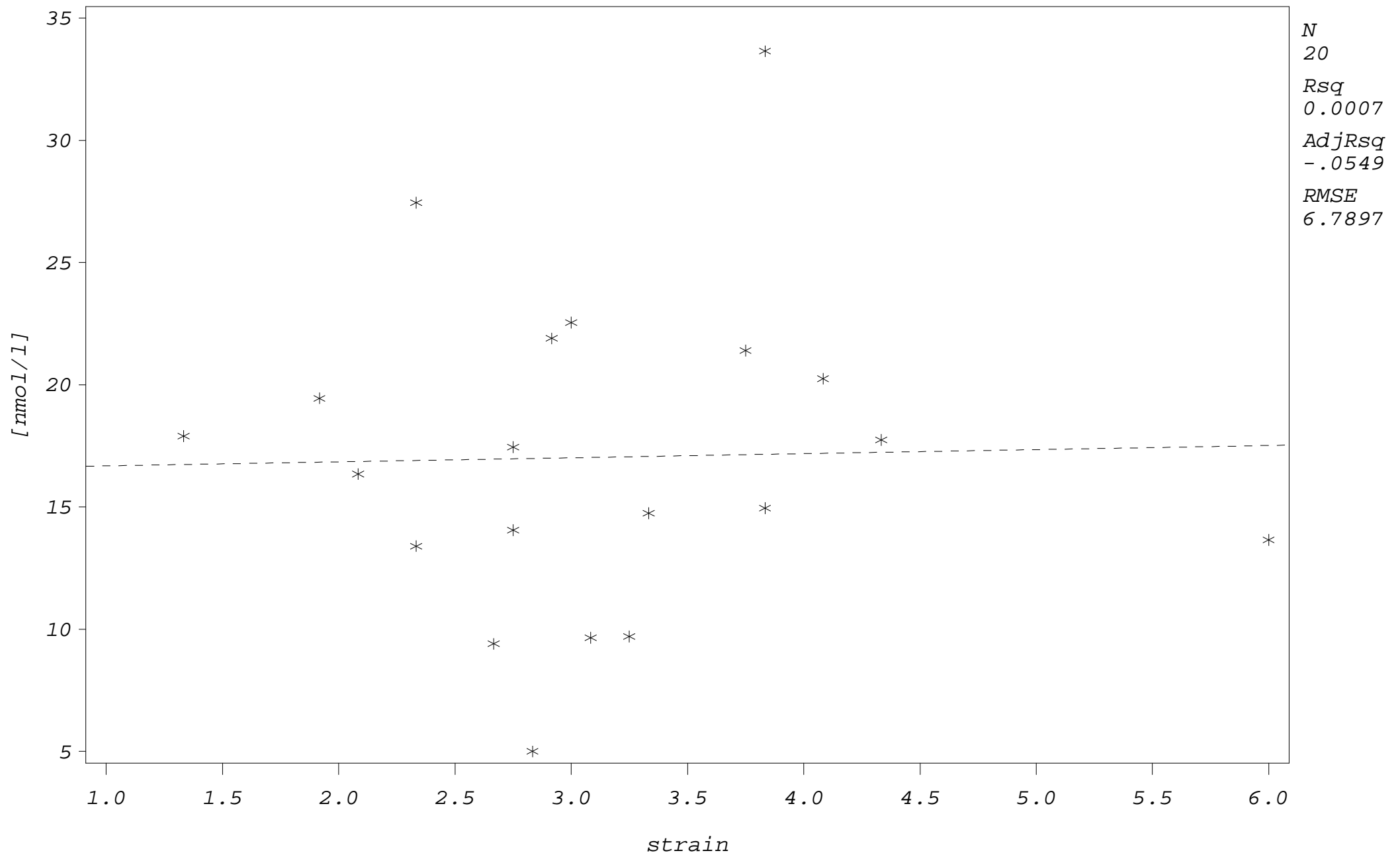
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=3 sampling occasion=6



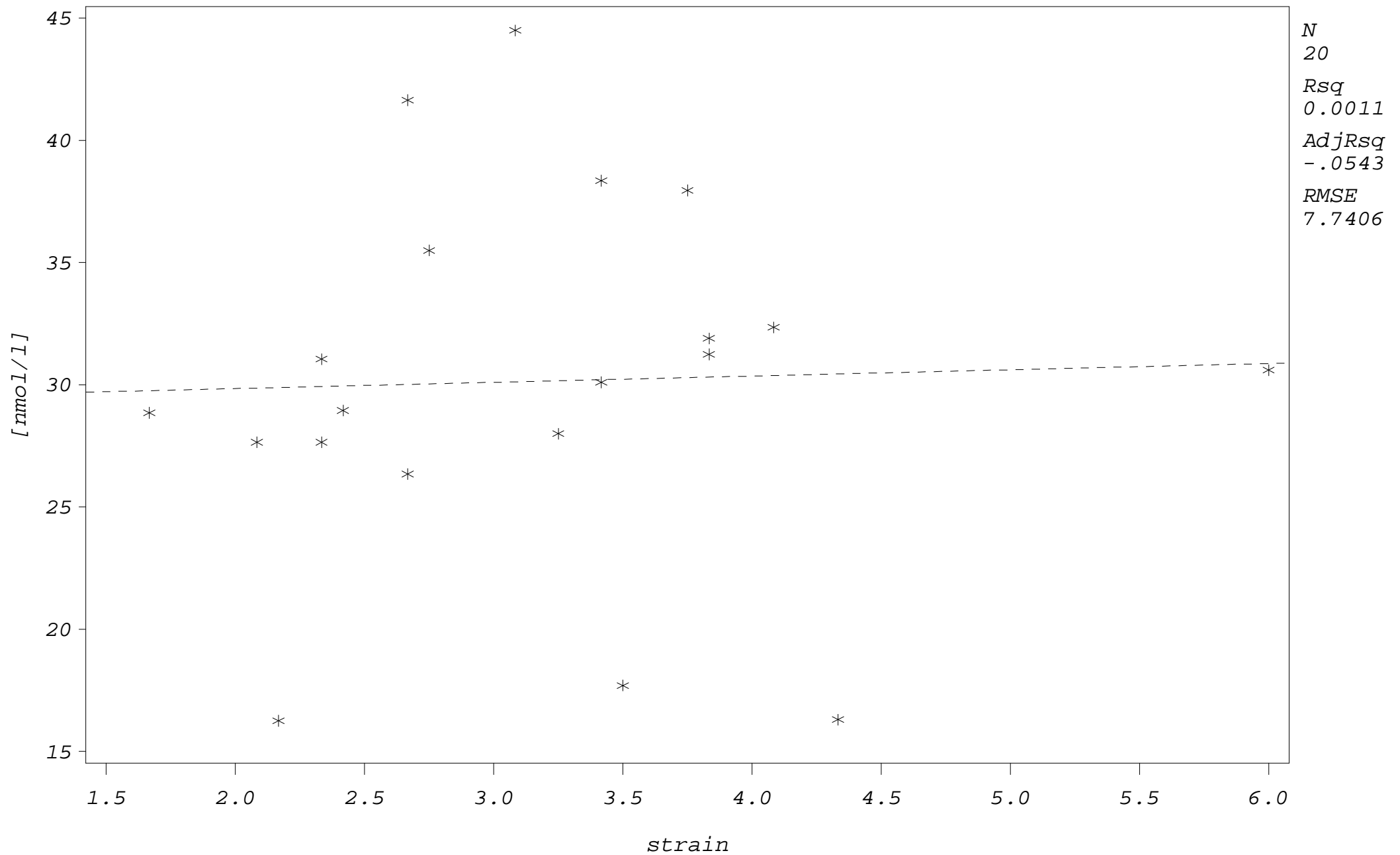
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=4 sampling occasion=1



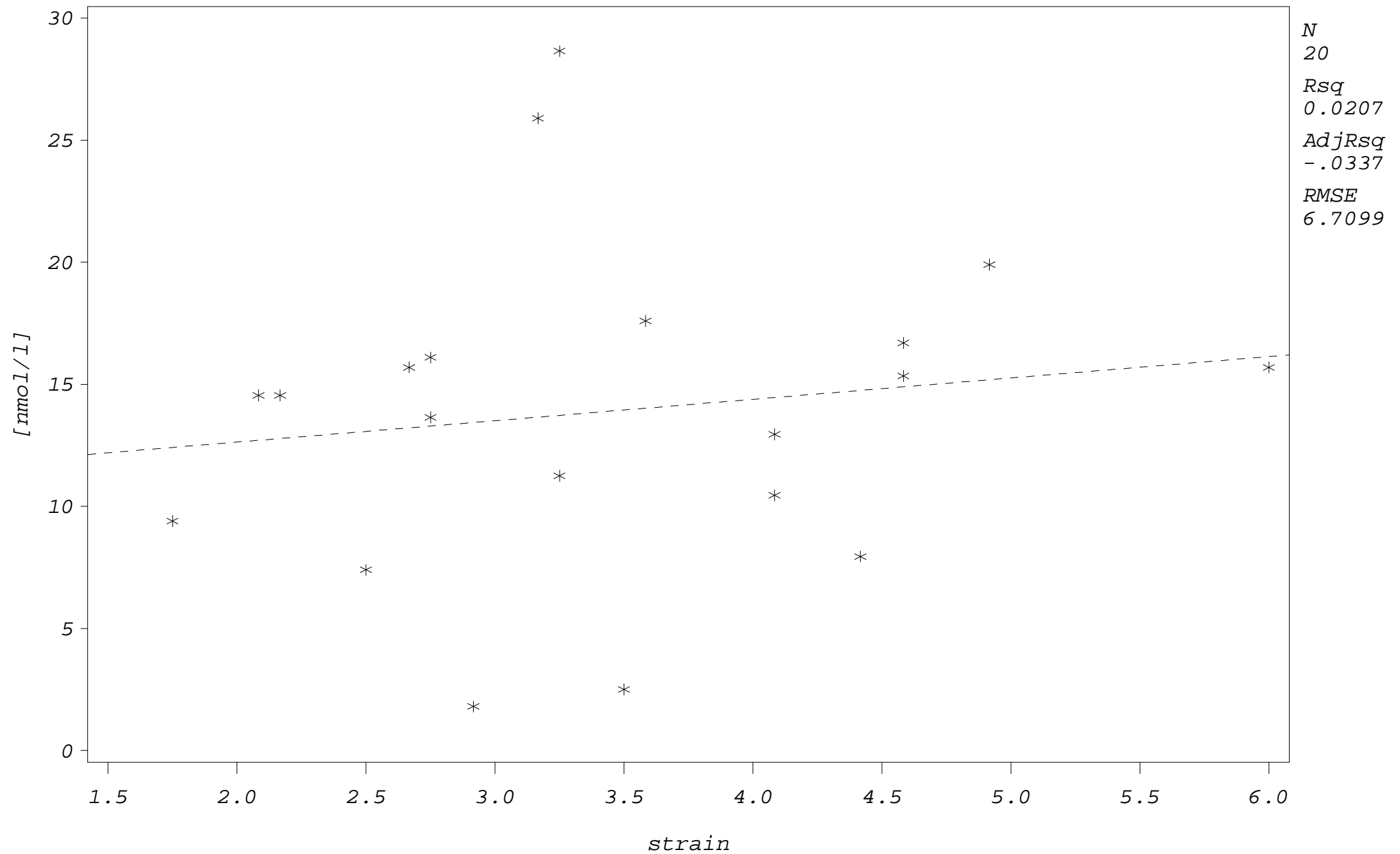
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=4 sampling occasion=2



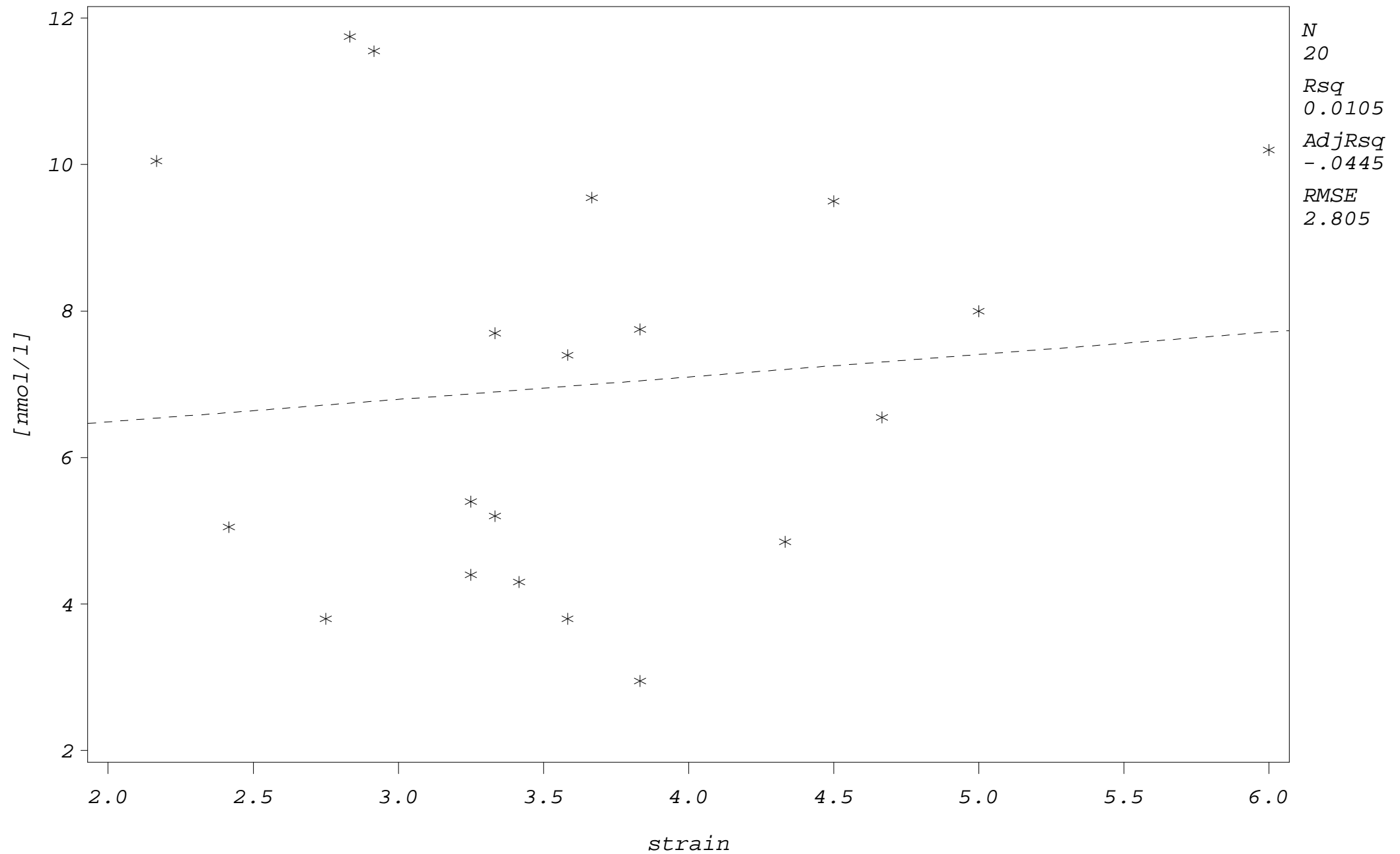
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=4 sampling occasion=3



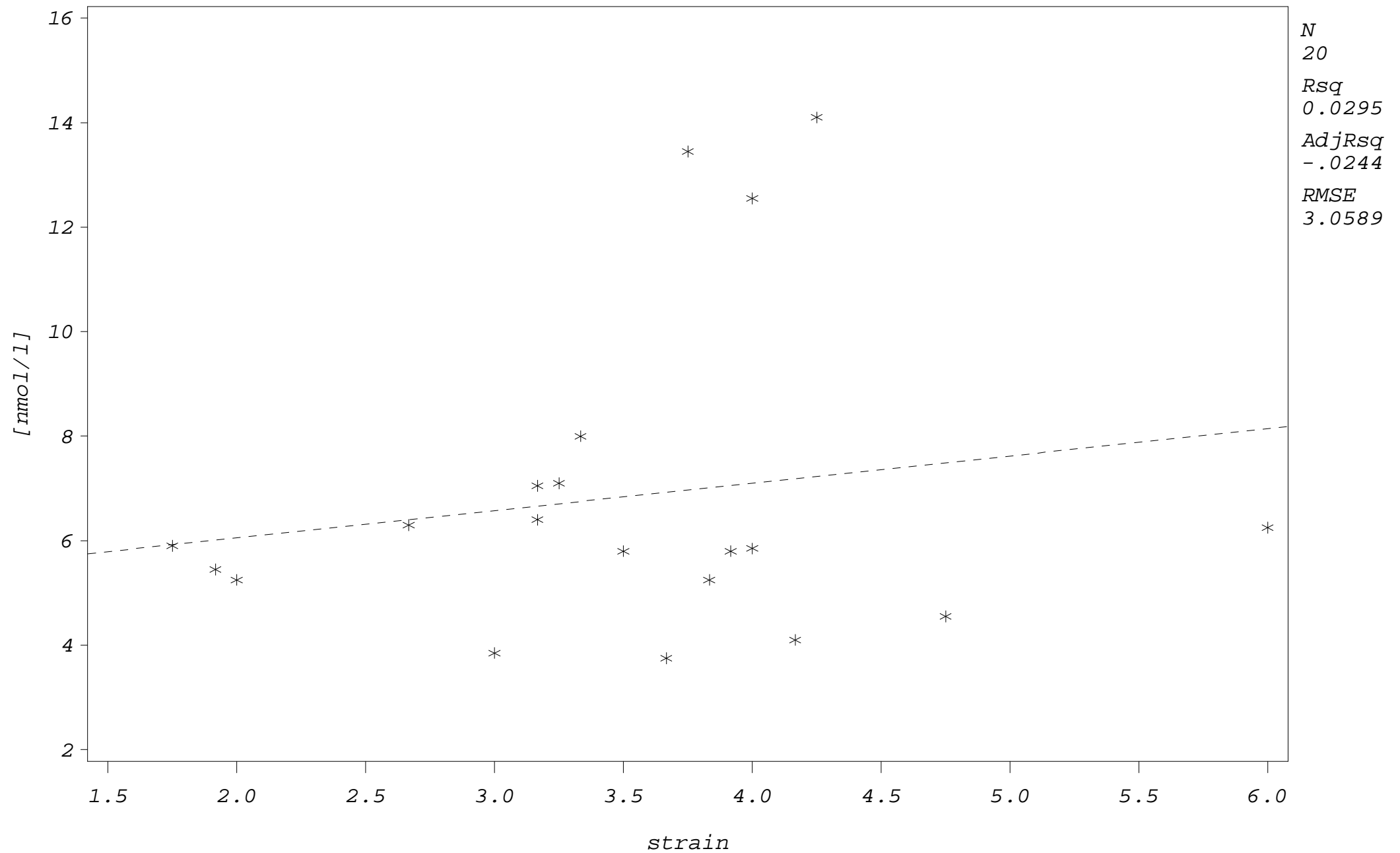
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=4 sampling occasion=4



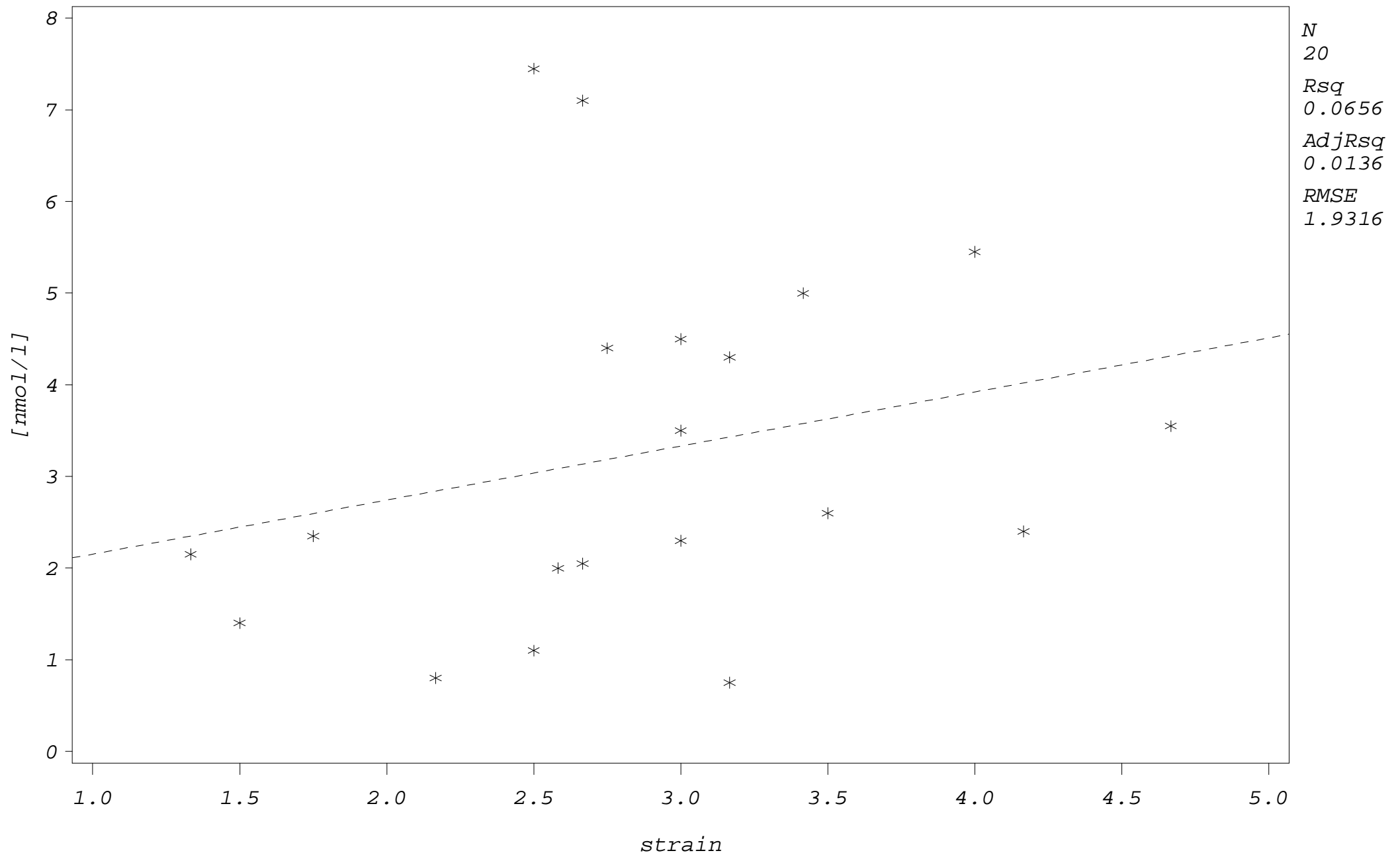
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=4 sampling occasion=5



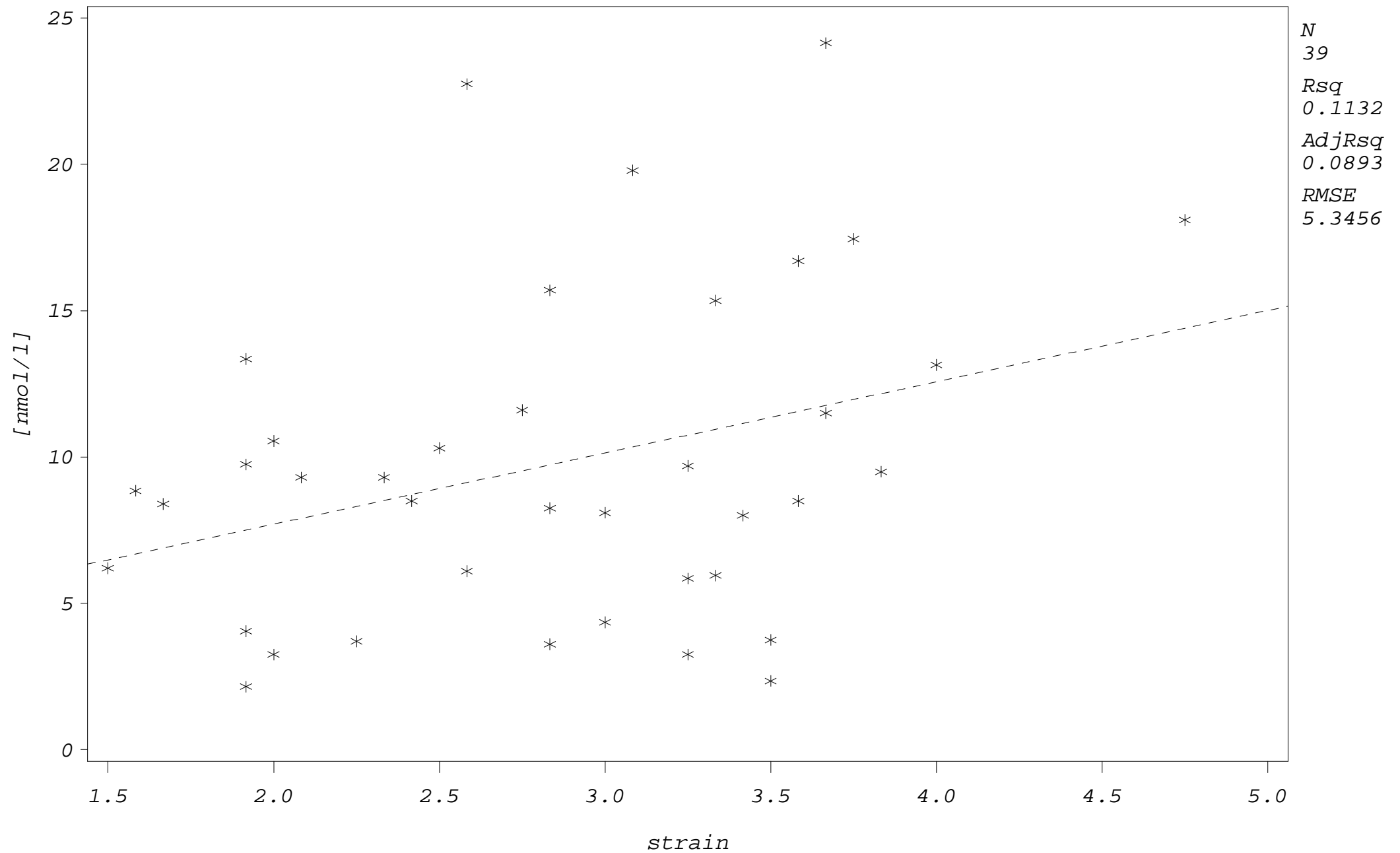
Study 1: cortisol levels * psychological strain (by occupational group)

occupational group=4 sampling occasion=6



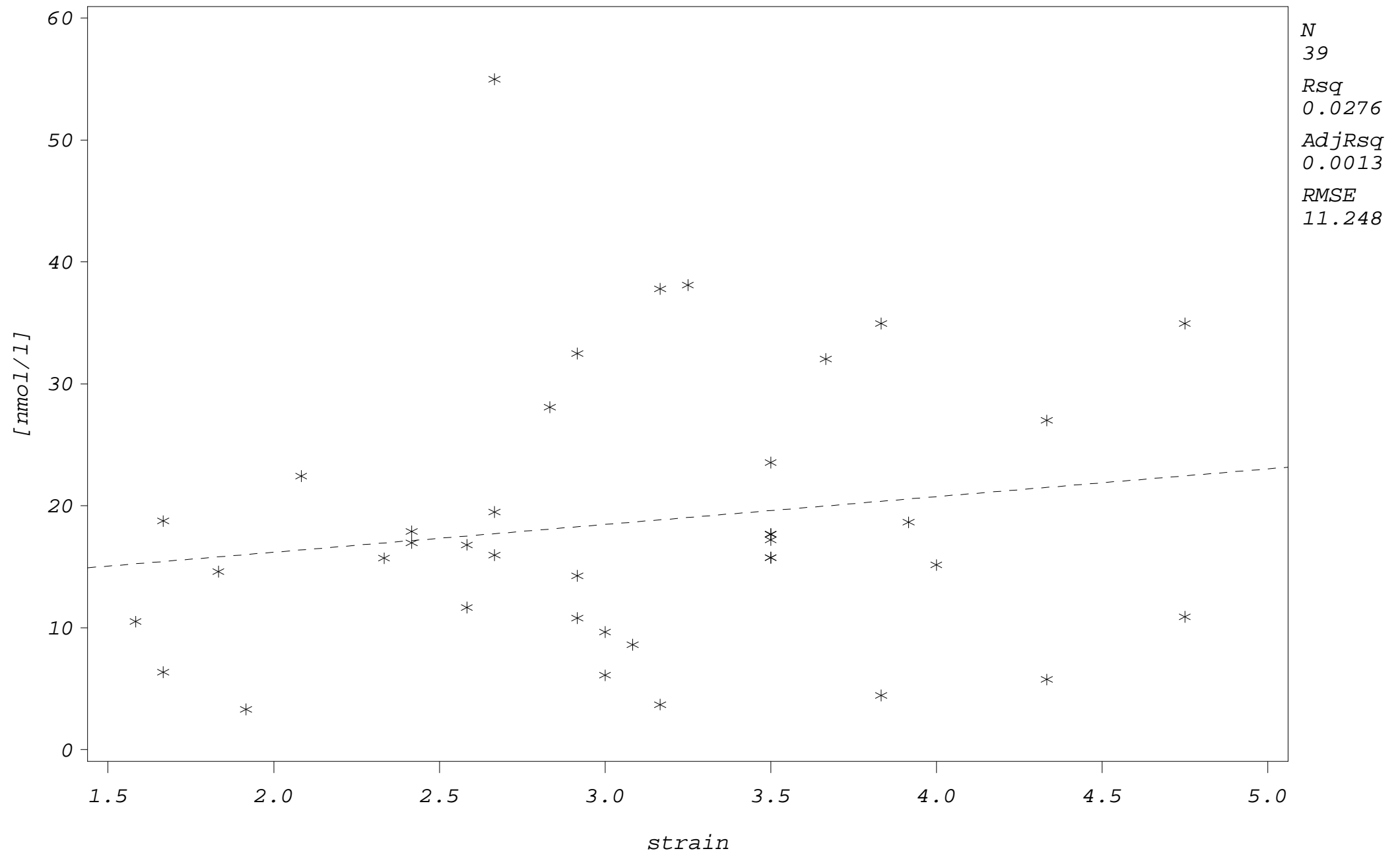
Study 1: cortisol levels * psychological strain (by shift work)

shift work=0 sampling occasion=1



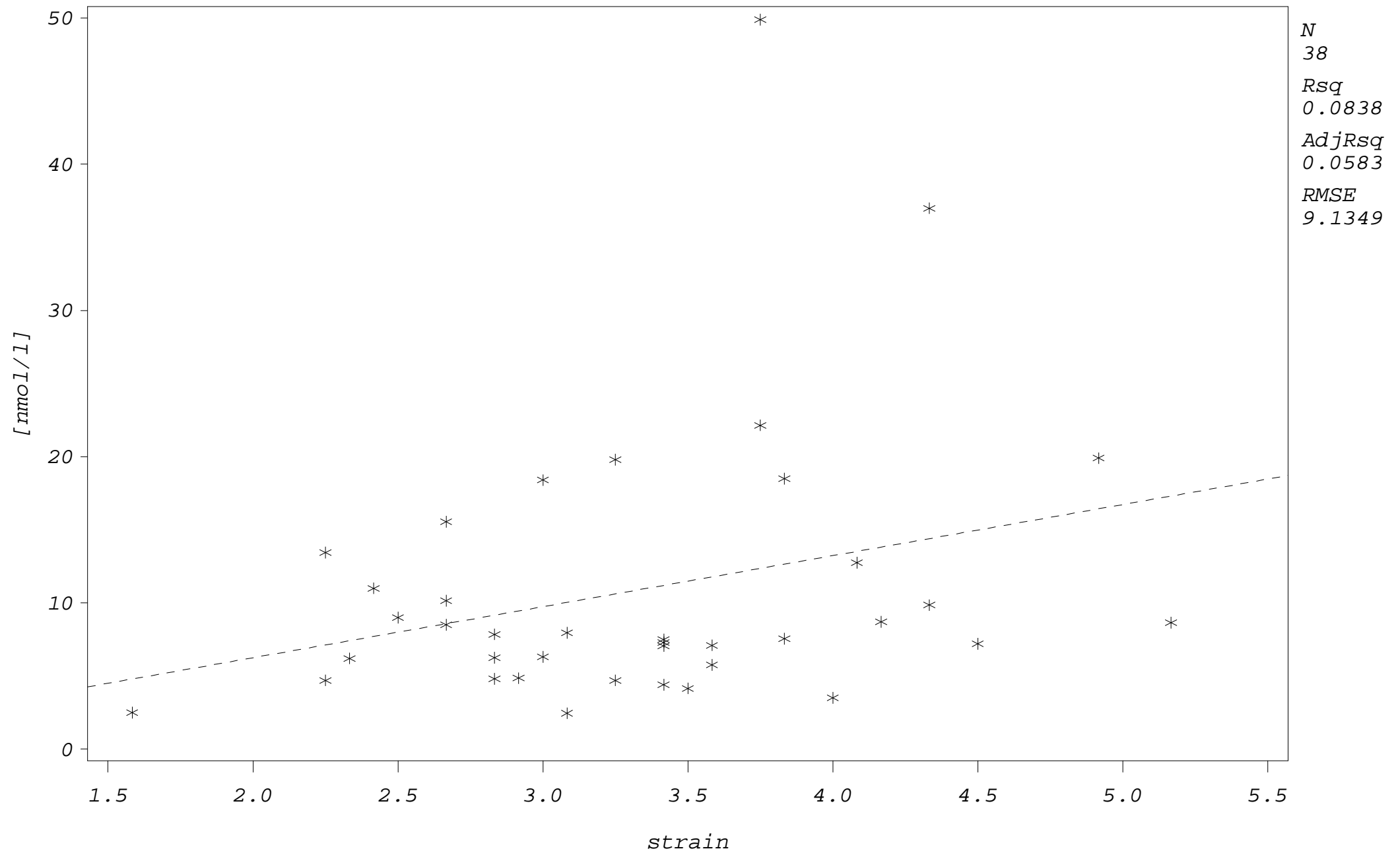
Study 1: cortisol levels * psychological strain (by shift work)

shift work=0 sampling occasion=2



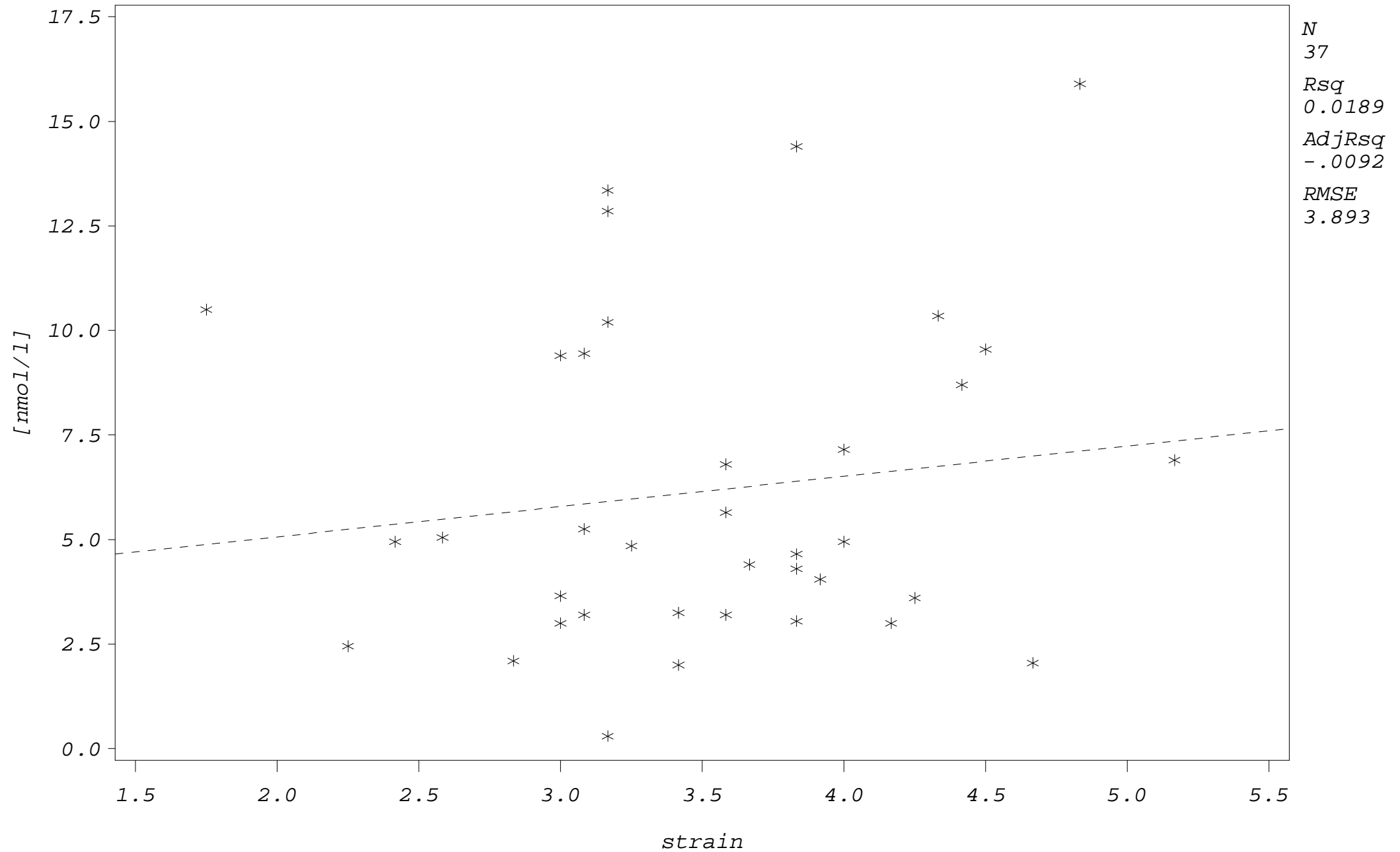
Study 1: cortisol levels * psychological strain (by shift work)

shift work=0 sampling occasion=3



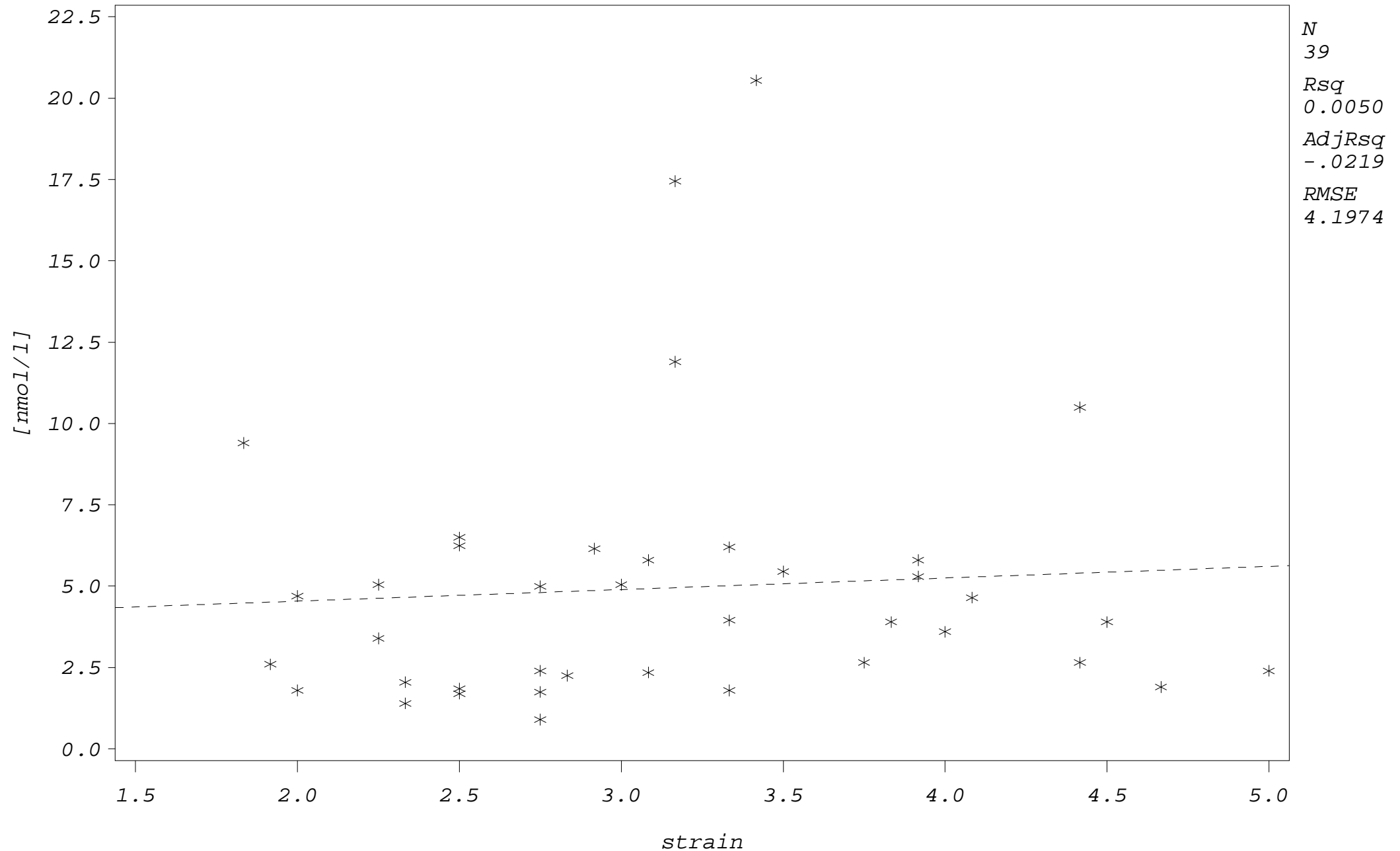
Study 1: cortisol levels * psychological strain (by shift work)

shift work=0 sampling occasion=4



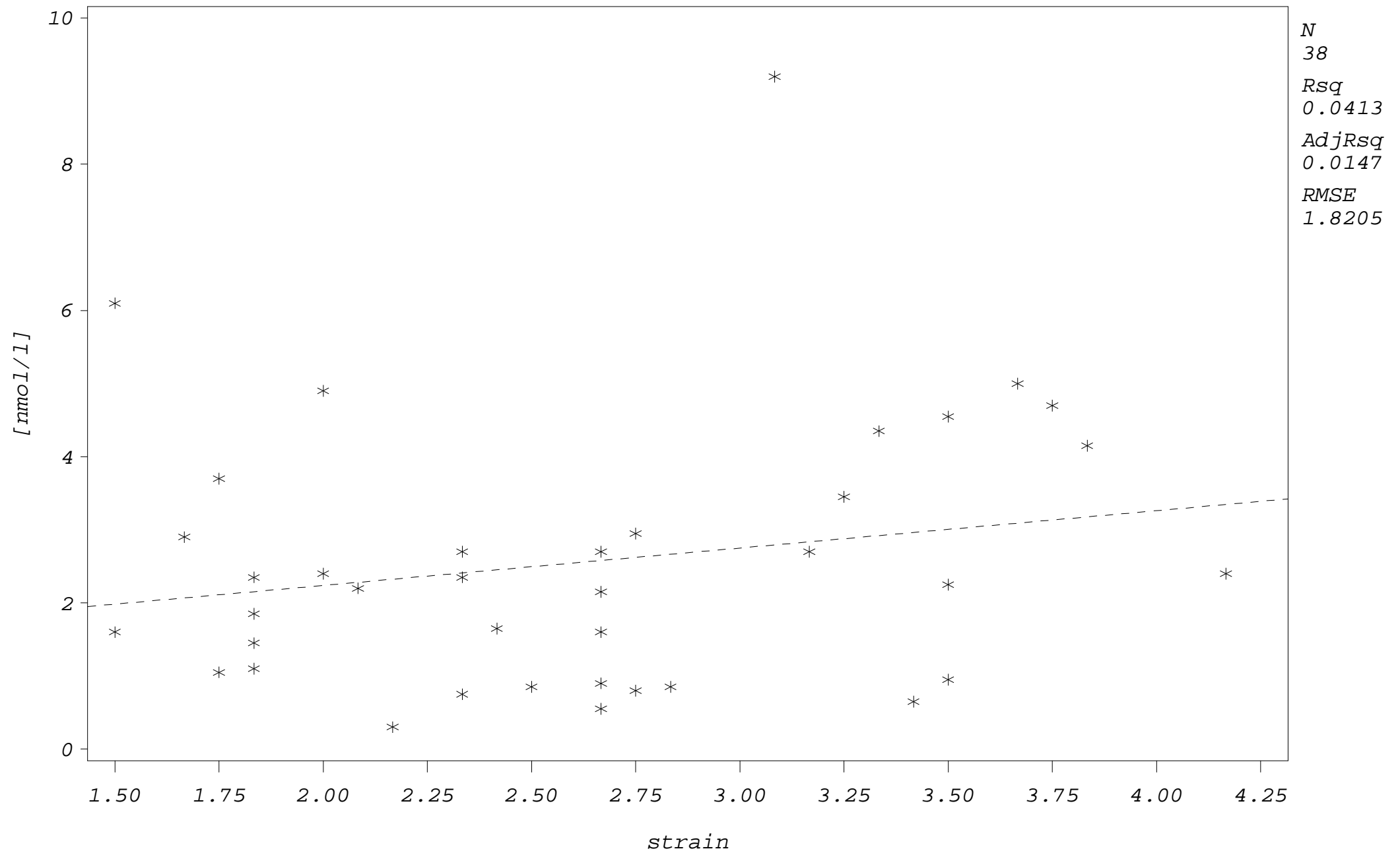
Study 1: cortisol levels * psychological strain (by shift work)

shift work=0 sampling occasion=5



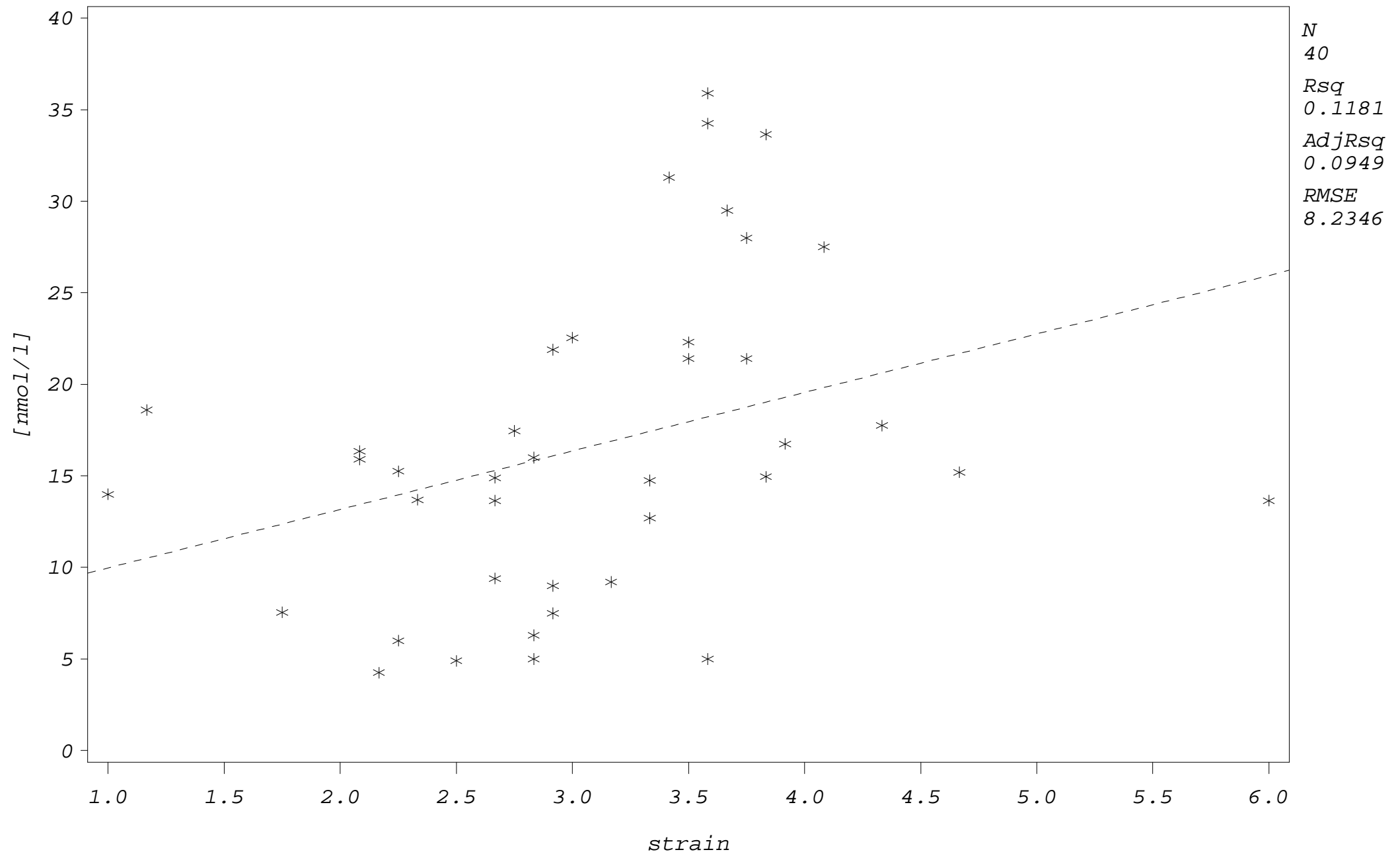
Study 1: cortisol levels * psychological strain (by shift work)

shift work=0 sampling occasion=6



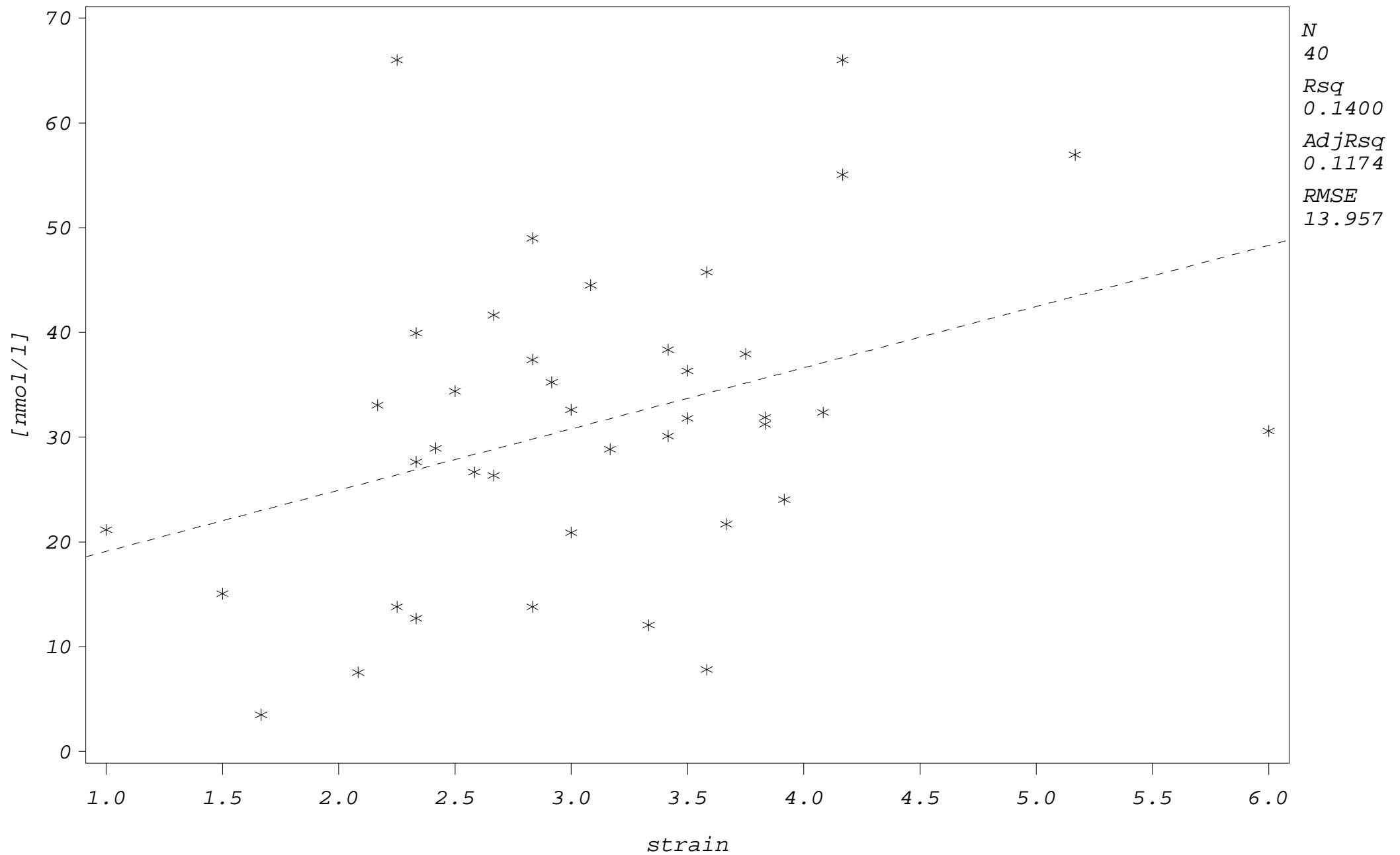
Study 1: cortisol levels * psychological strain (by shift work)

shift work=1 sampling occasion=1



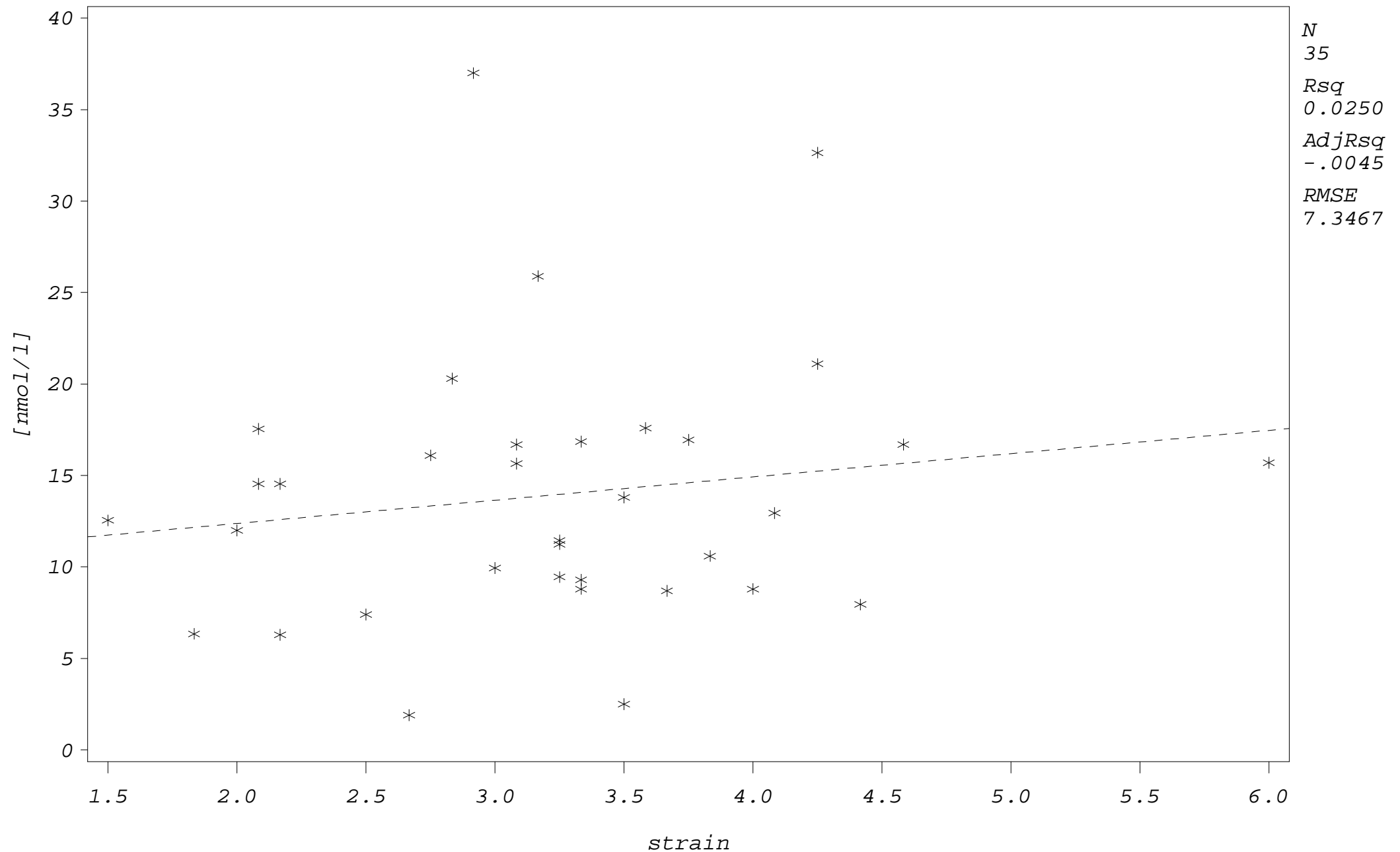
Study 1: cortisol levels * psychological strain (by shift work)

shift work=1 sampling occasion=2



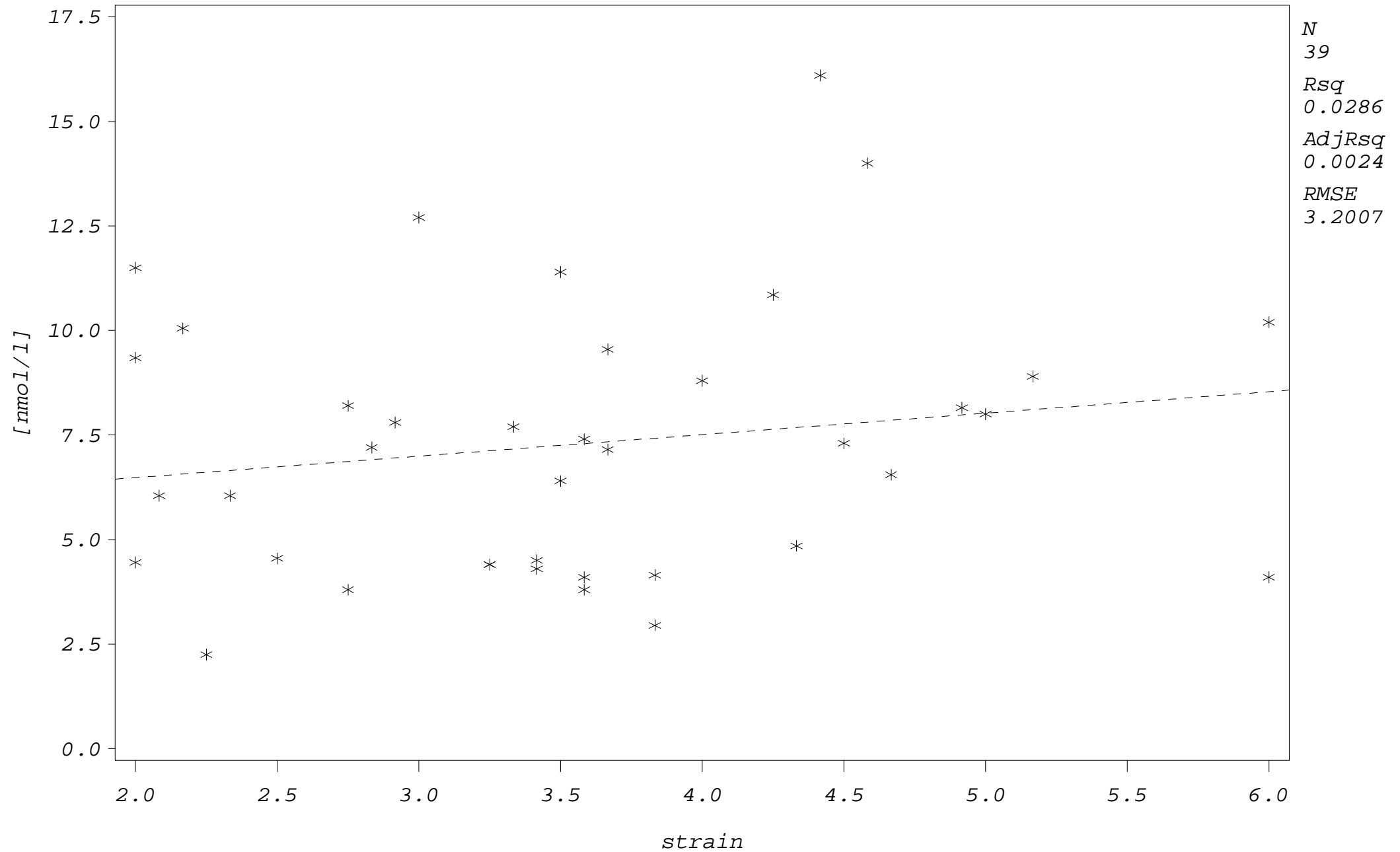
Study 1: cortisol levels * psychological strain (by shift work)

shift work=1 sampling occasion=3



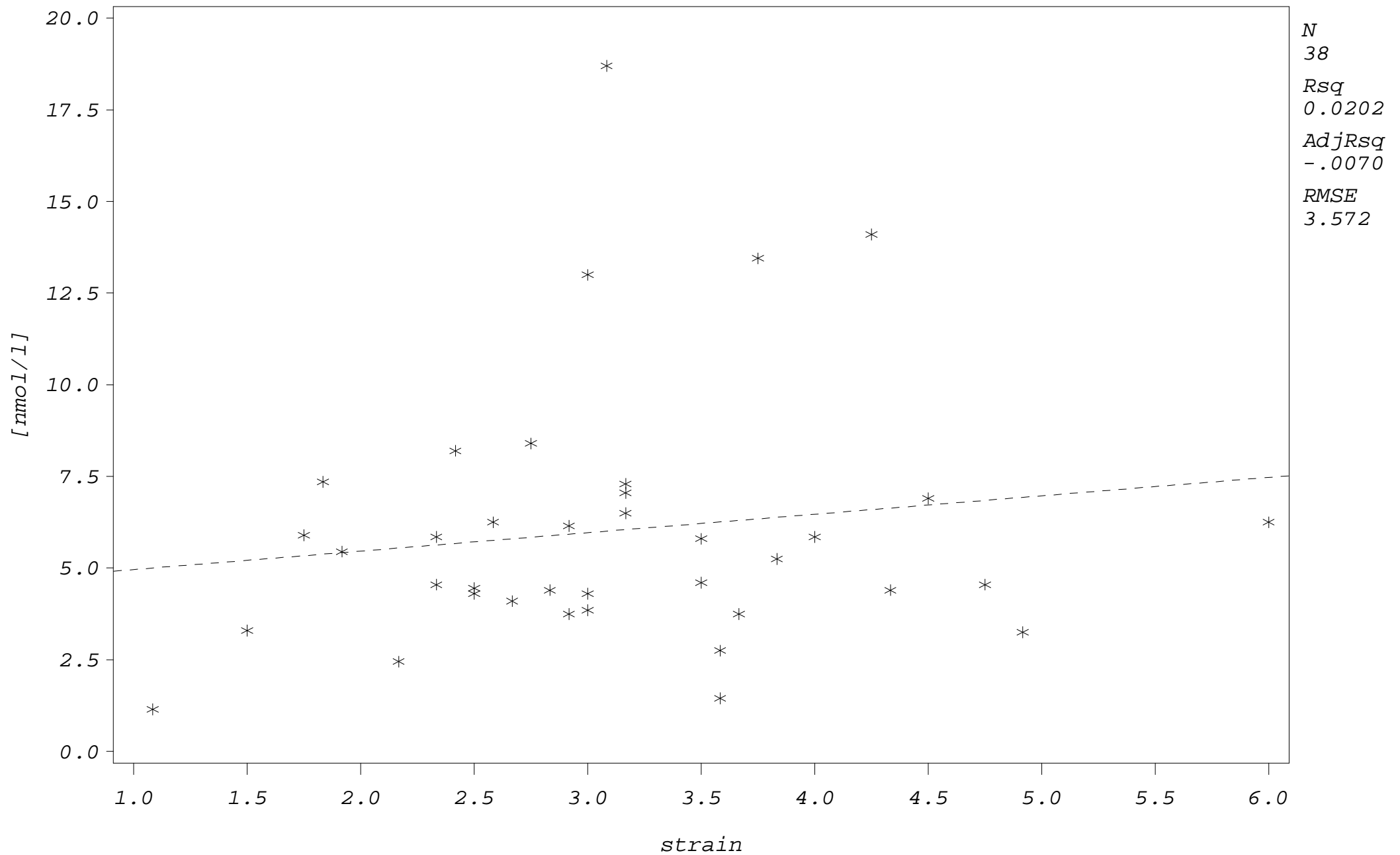
Study 1: cortisol levels * psychological strain (by shift work)

shift work=1 sampling occasion=4



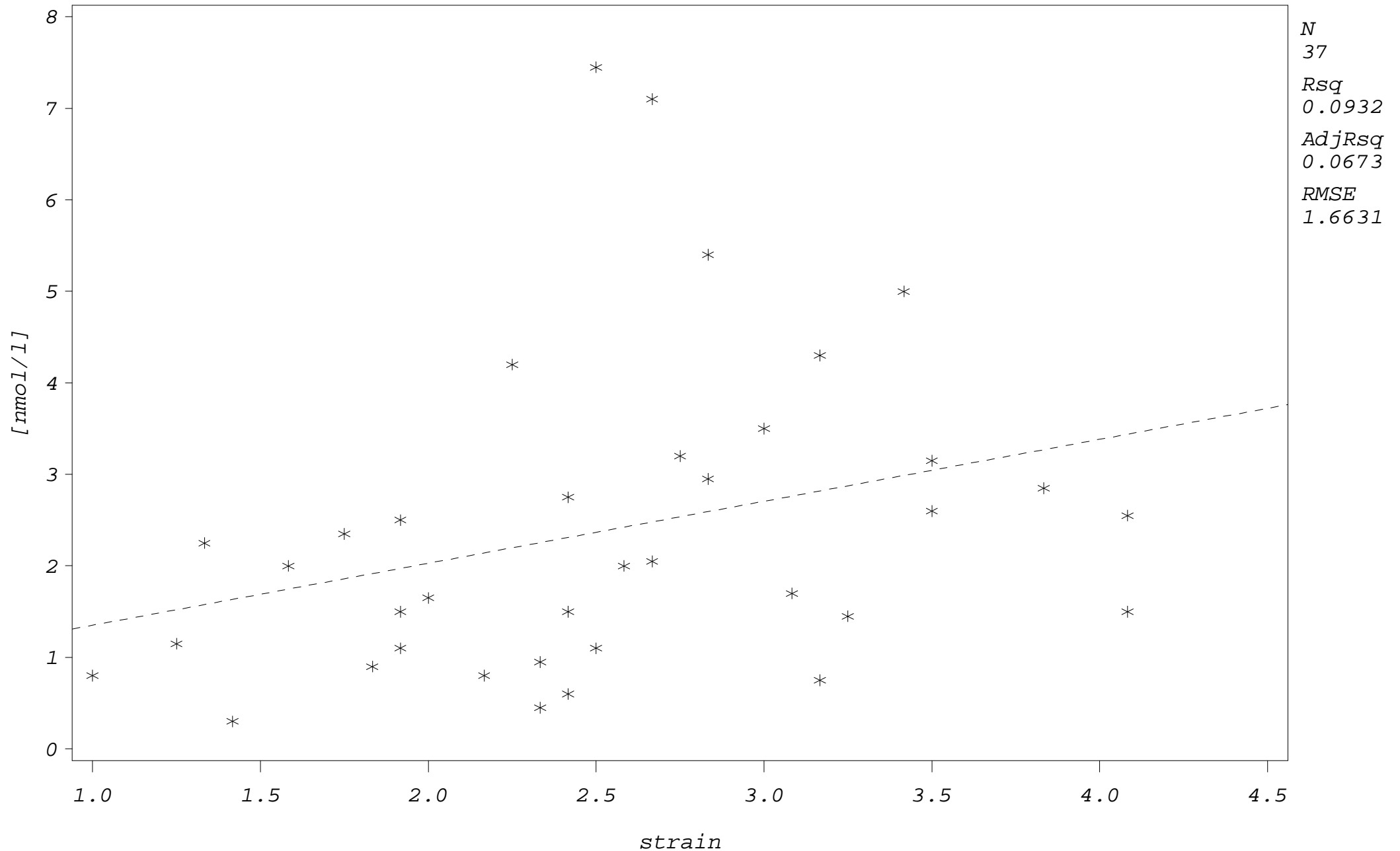
Study 1: cortisol levels * psychological strain (by shift work)

shift work=1 sampling occasion=5



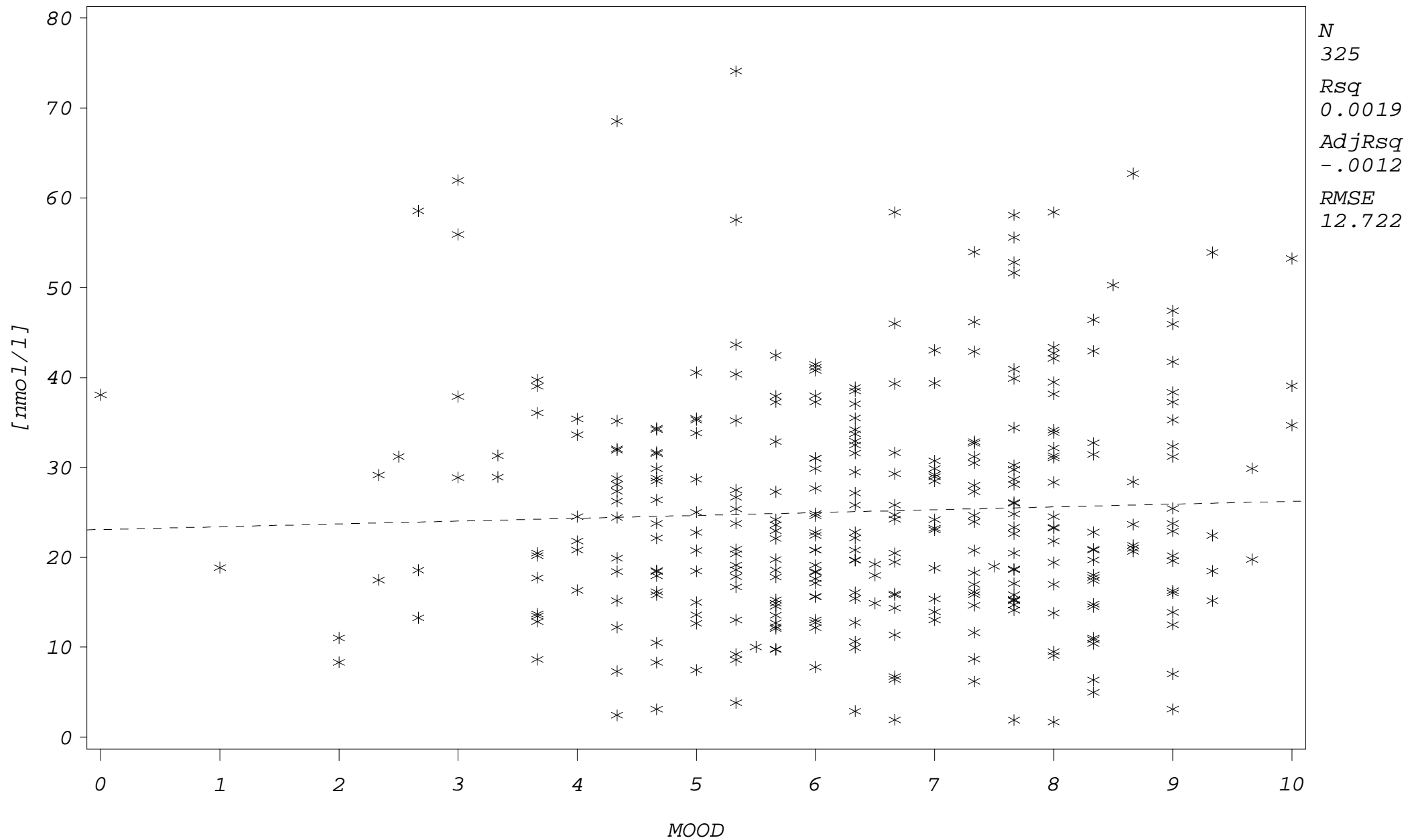
Study 1: cortisol levels * psychological strain (by shift work)

shift work=1 sampling occasion=6



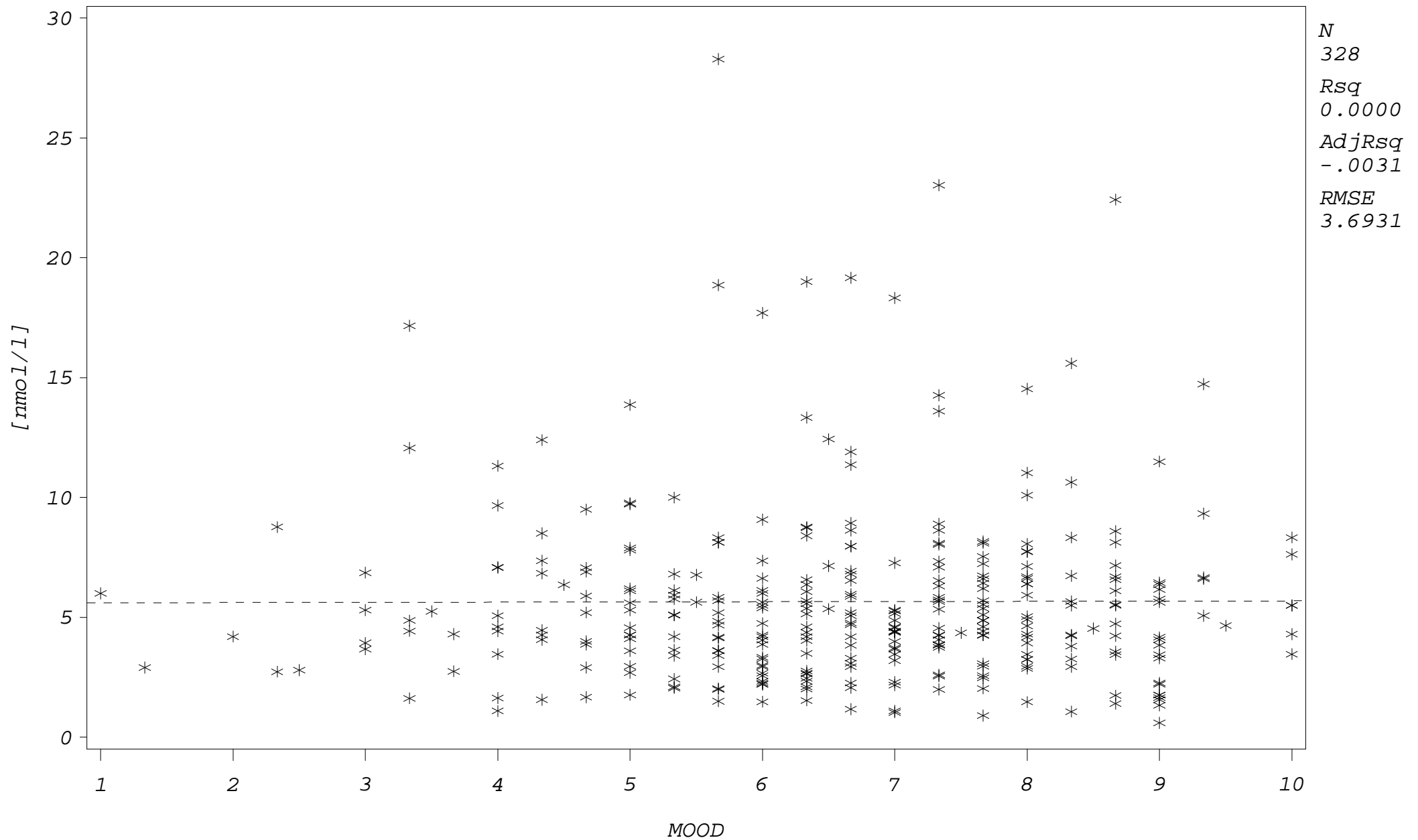
Study 2: cortisol levels * mood (entire sample)

sampling occasion=2



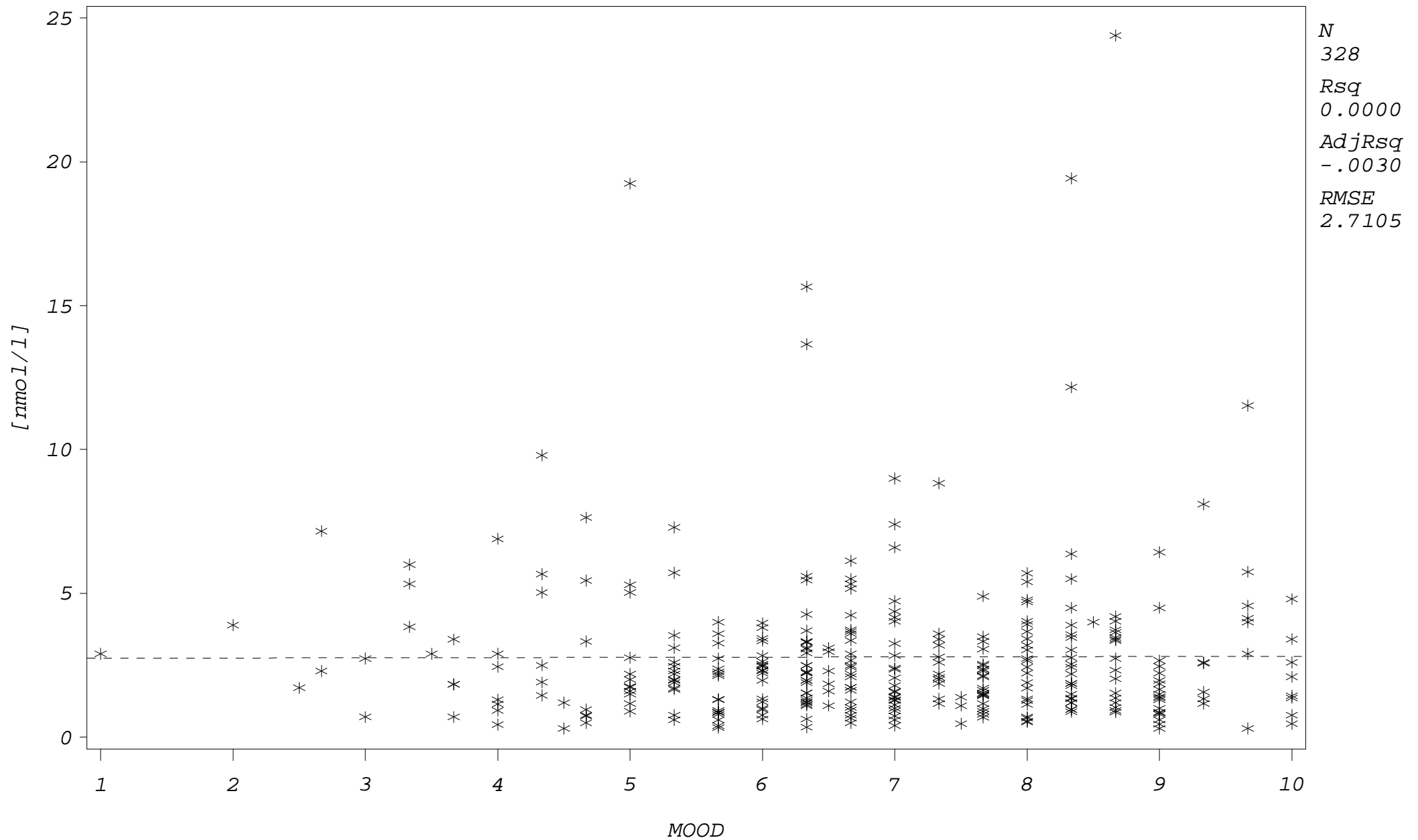
Study 2: cortisol levels * mood (entire sample)

sampling occasion=3

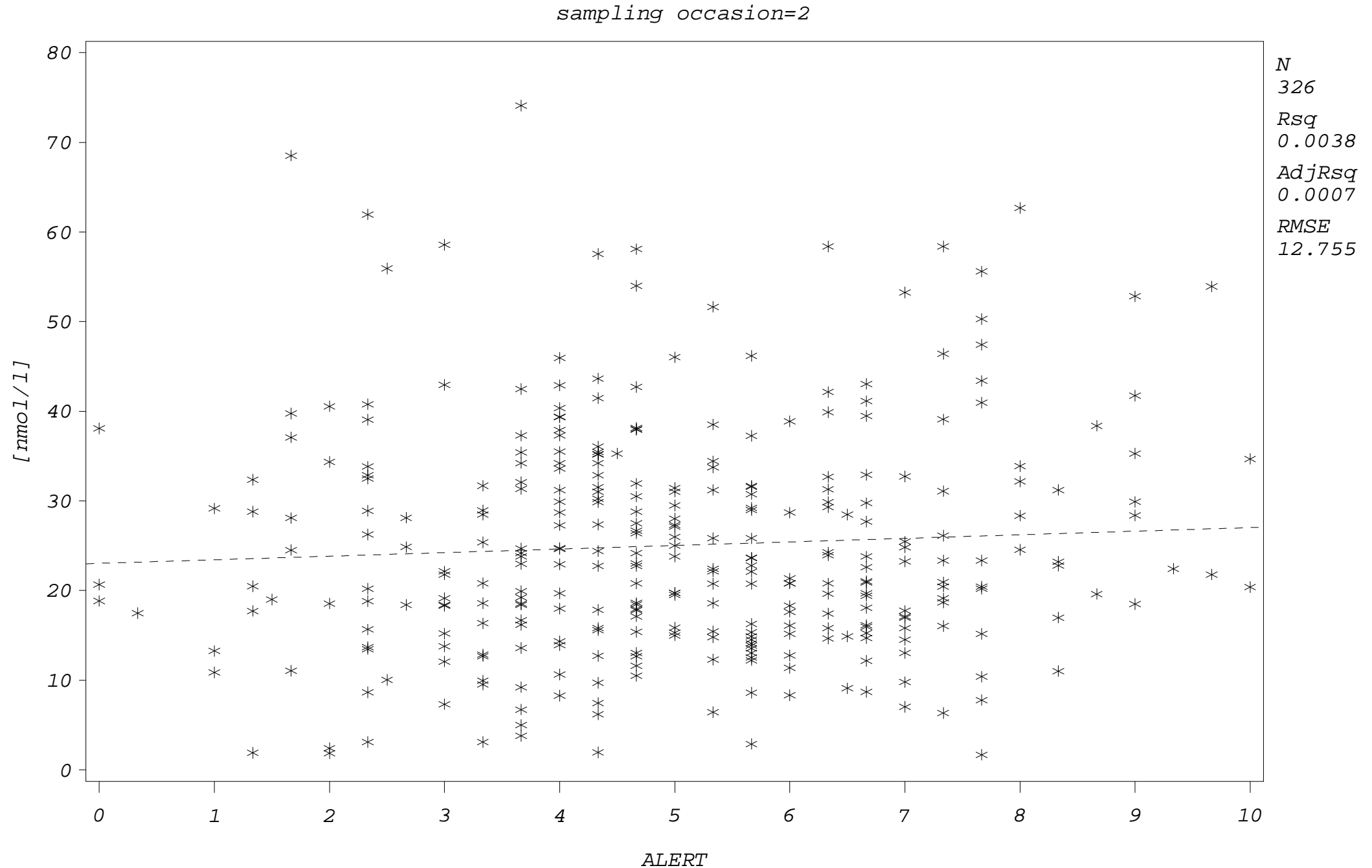


Study 2: cortisol levels * mood (entire sample)

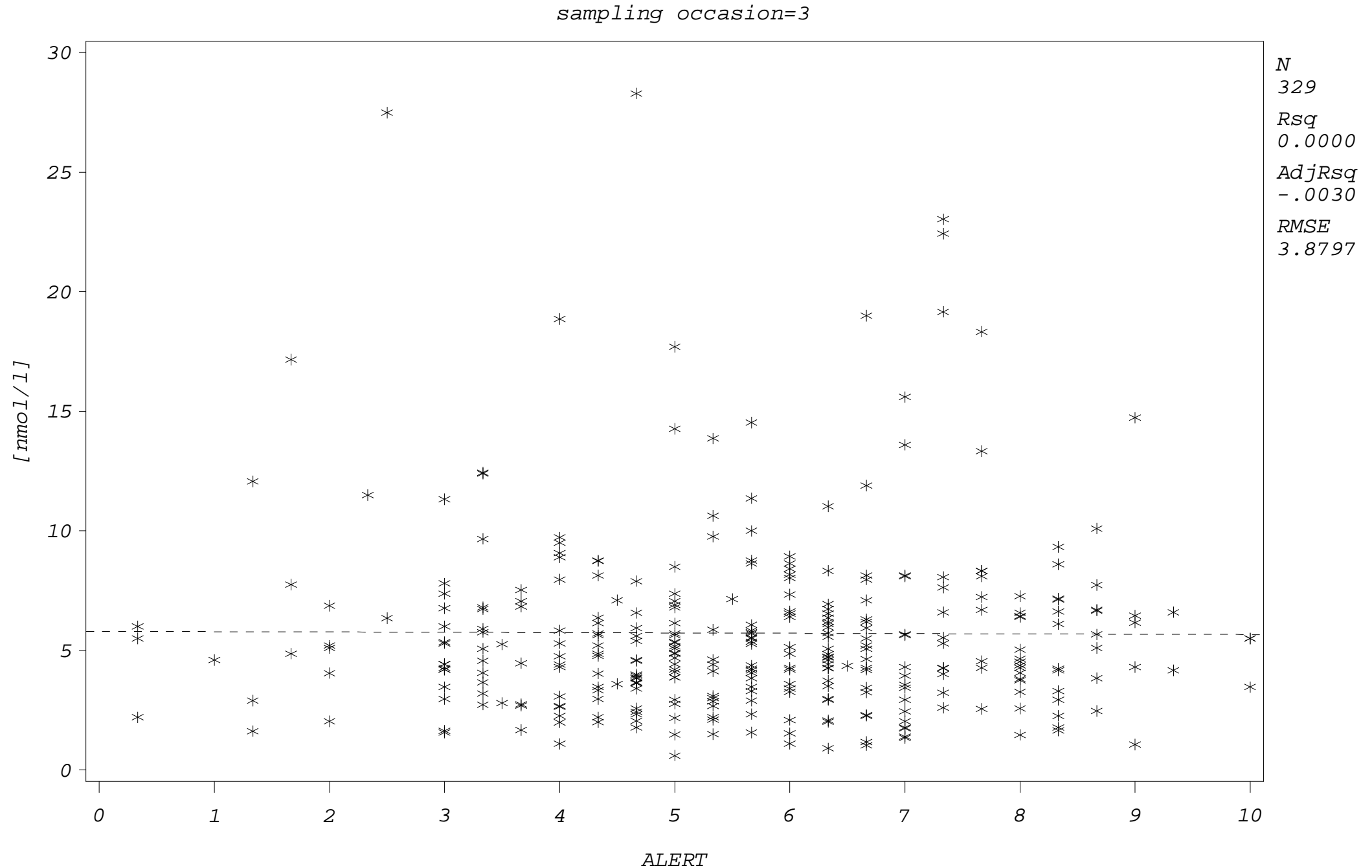
sampling occasion=4



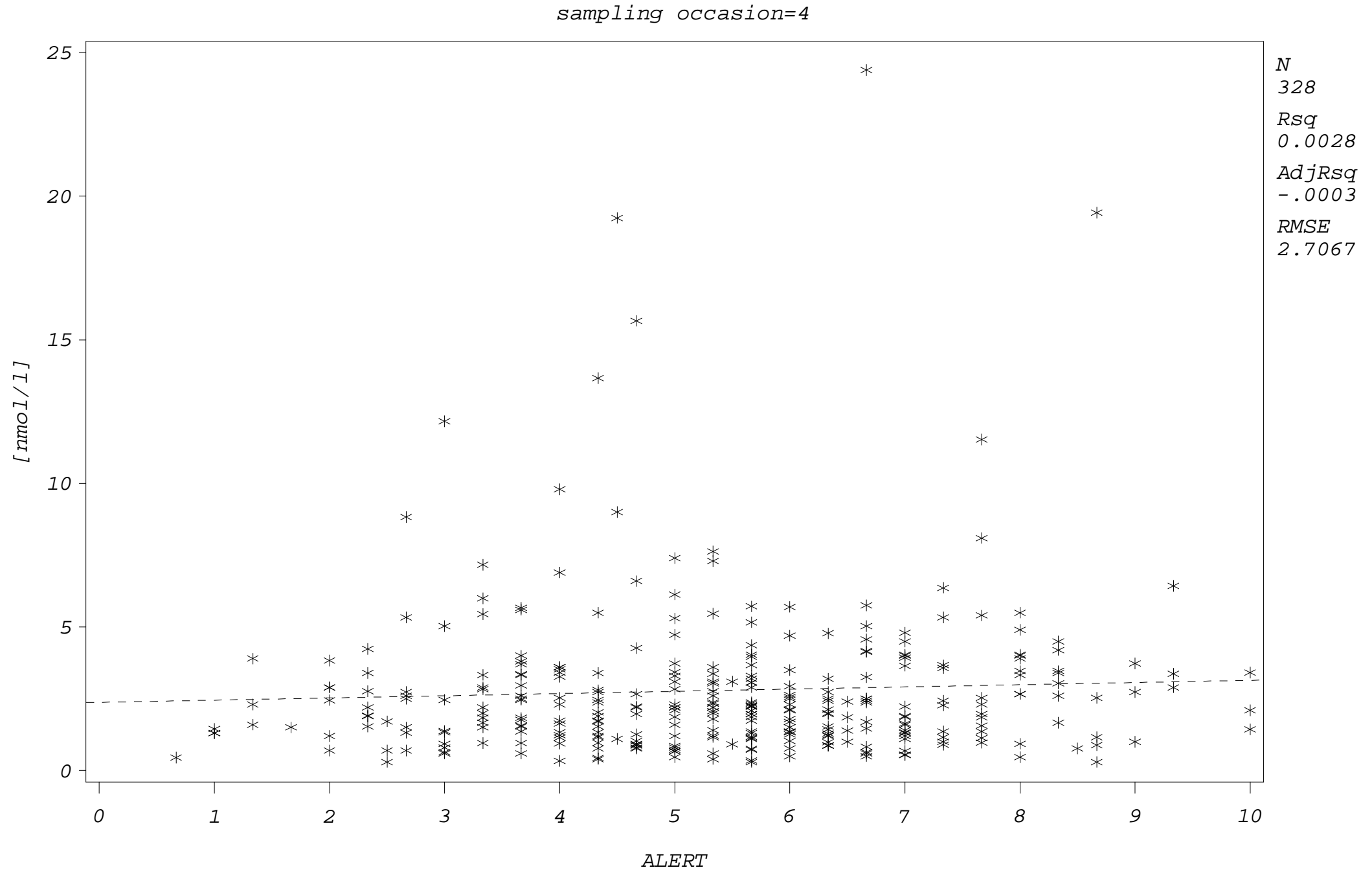
Study 2: cortisol levels * alertness (entire sample)



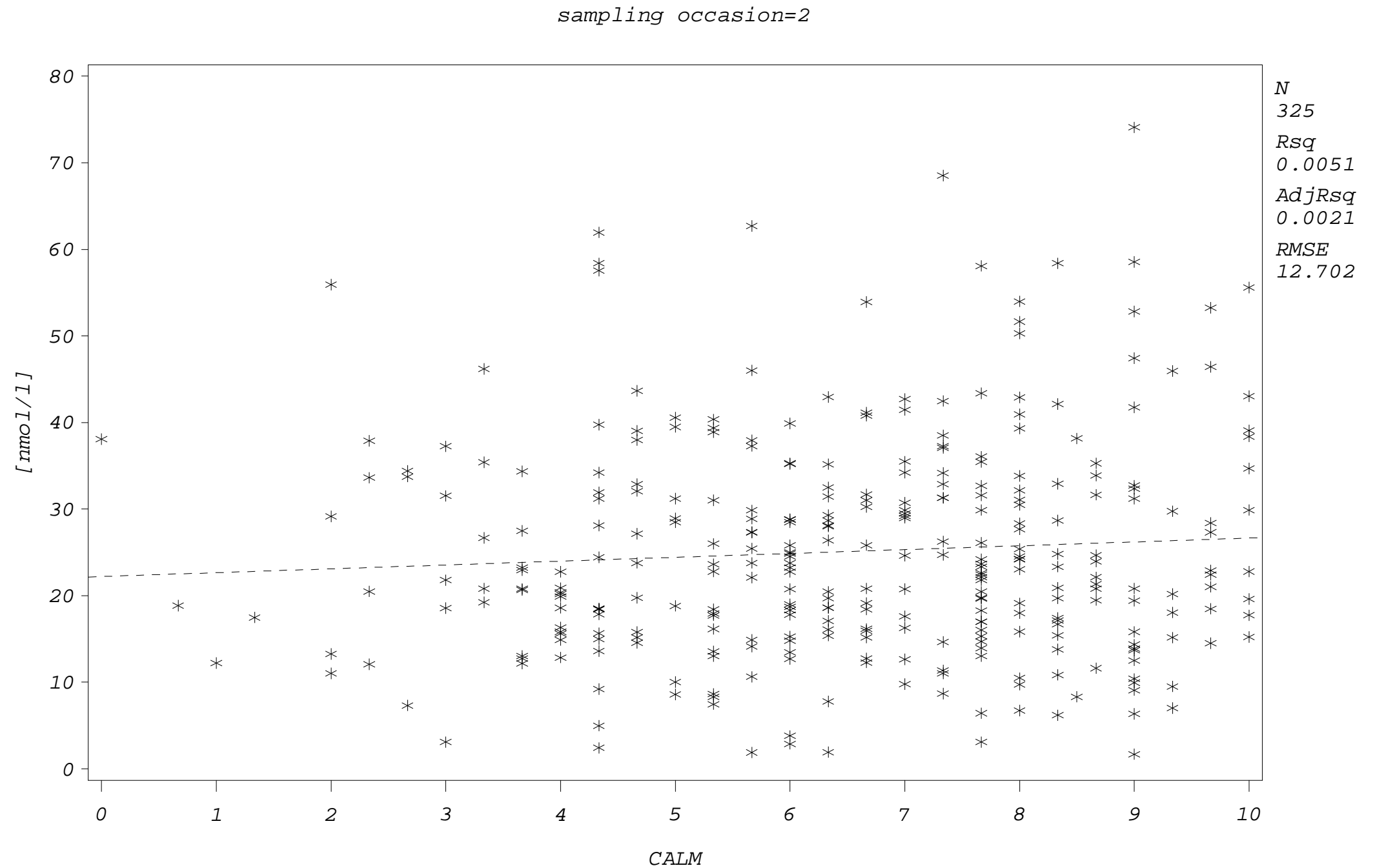
Study 2: cortisol levels * alertness (entire sample)



Study 2: cortisol levels * alertness (entire sample)

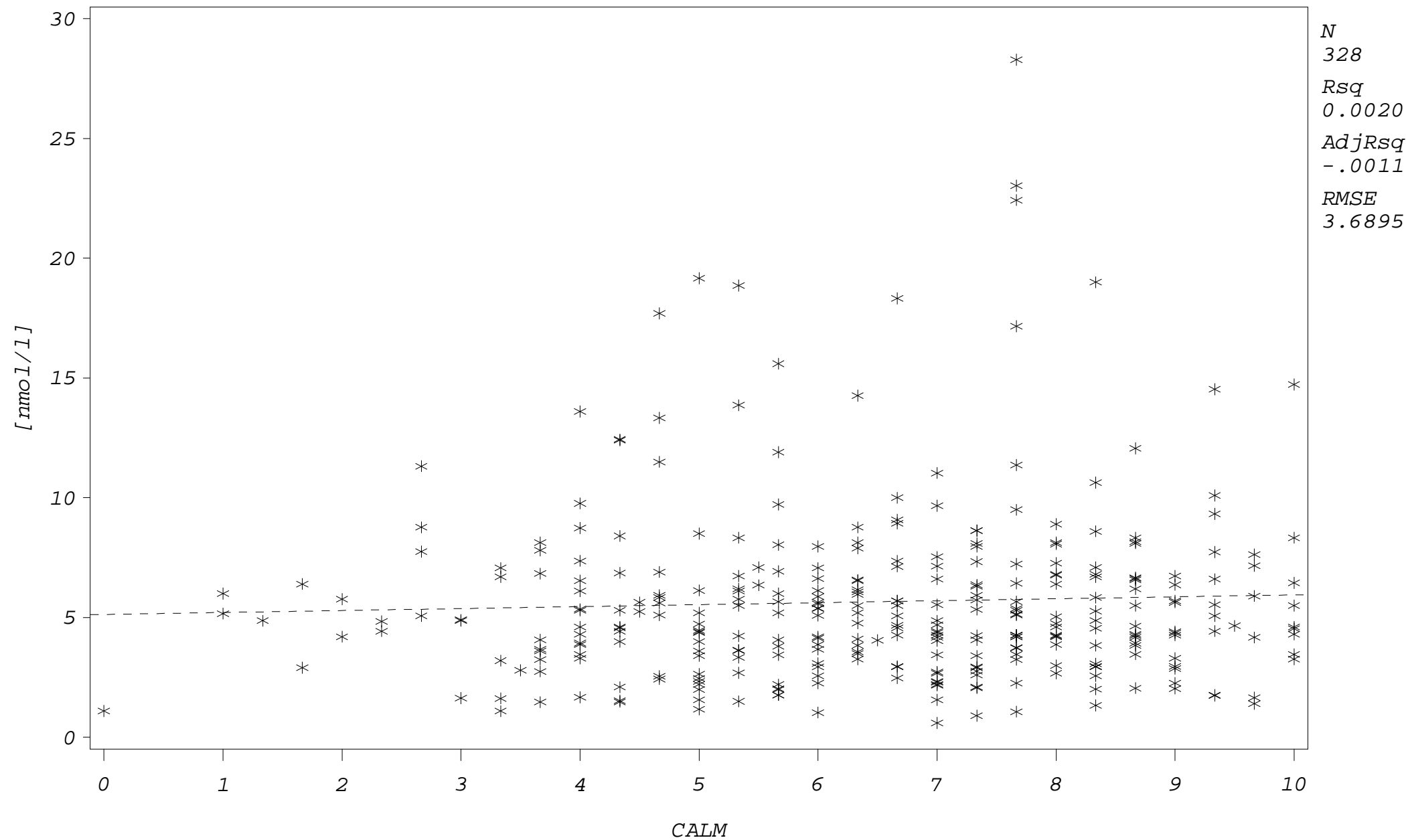


Study 2: cortisol levels * calmness (entire sample)



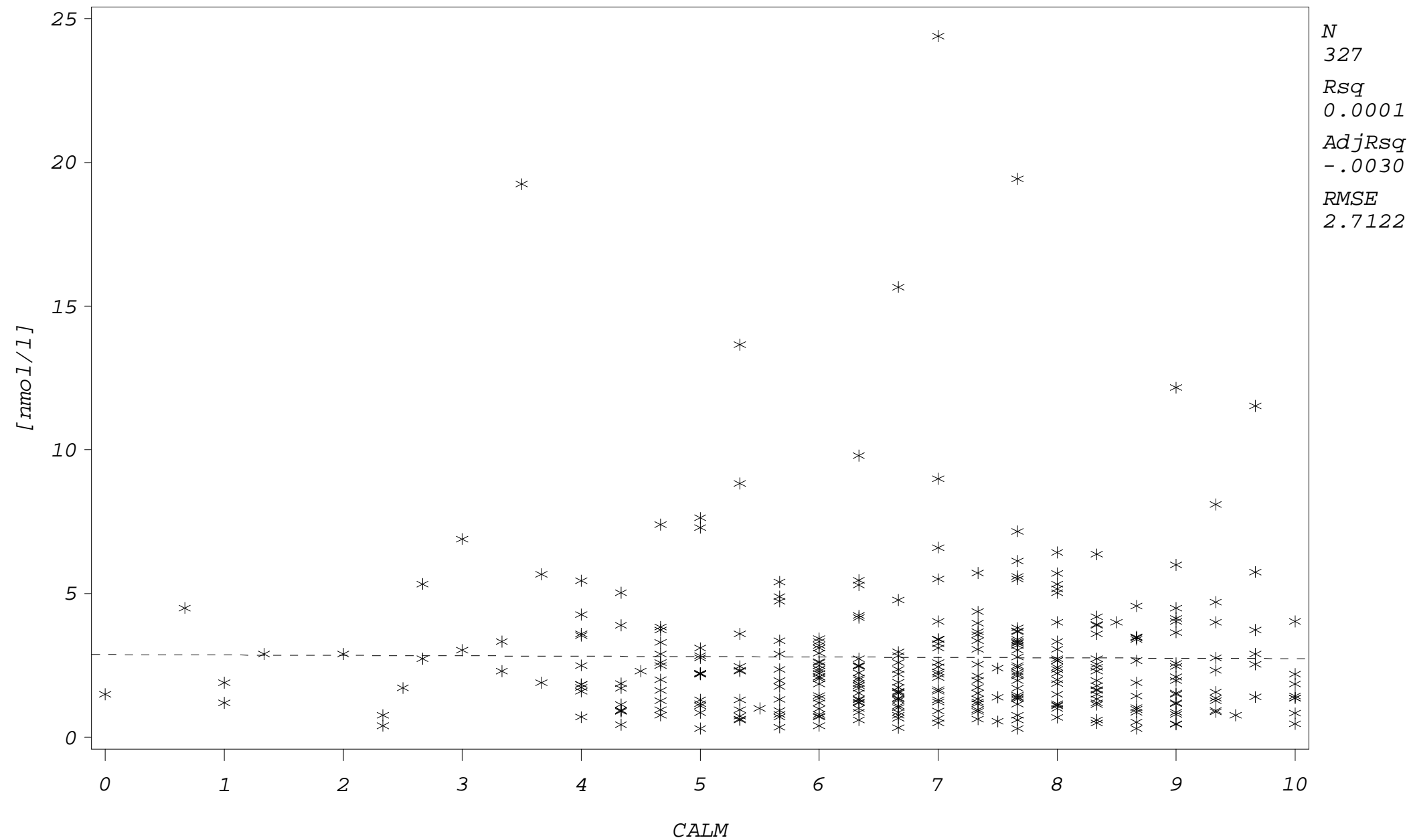
Study 2: cortisol levels * calmness (entire sample)

sampling occasion=3



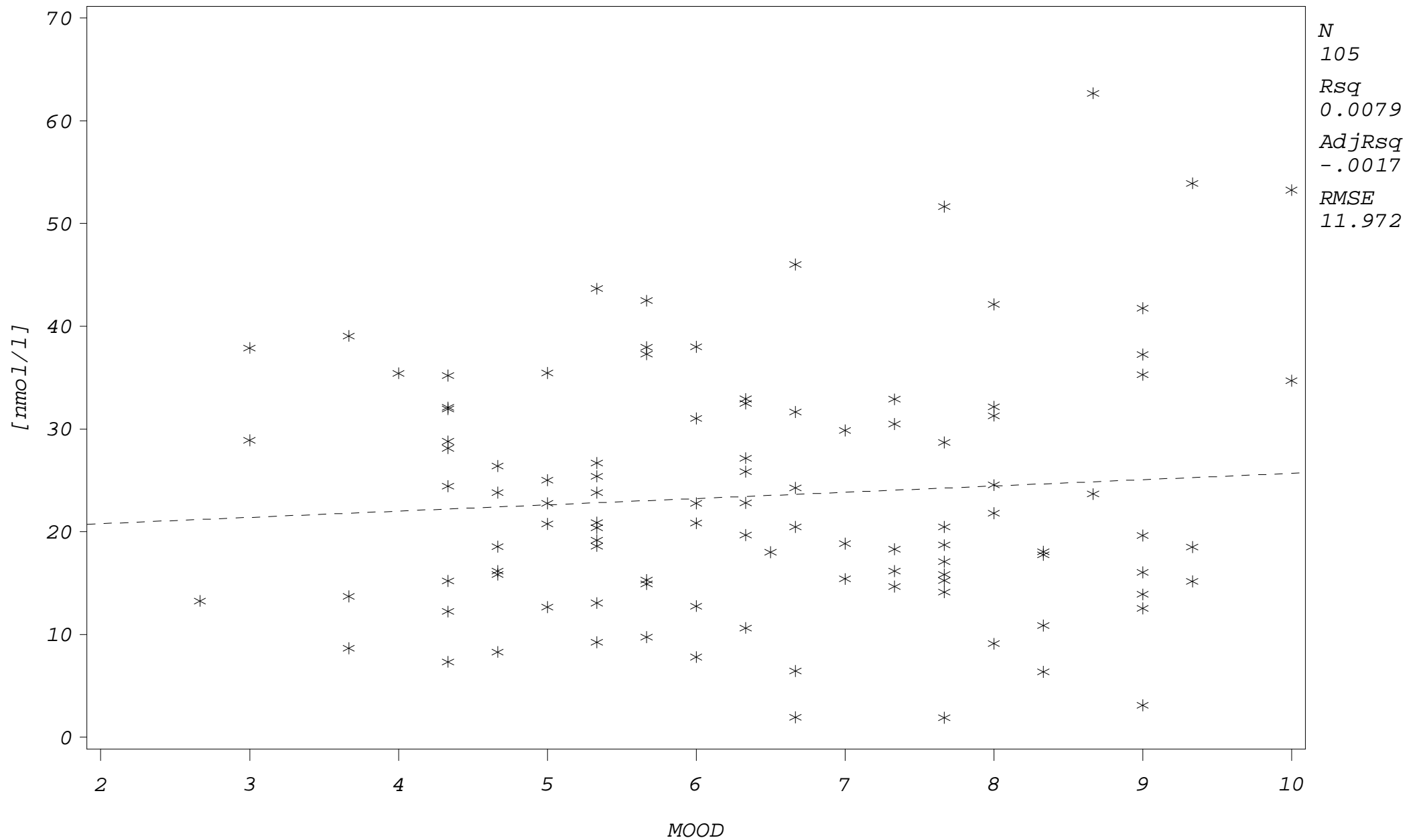
Study 2: cortisol levels * calmness (entire sample)

sampling occasion=4



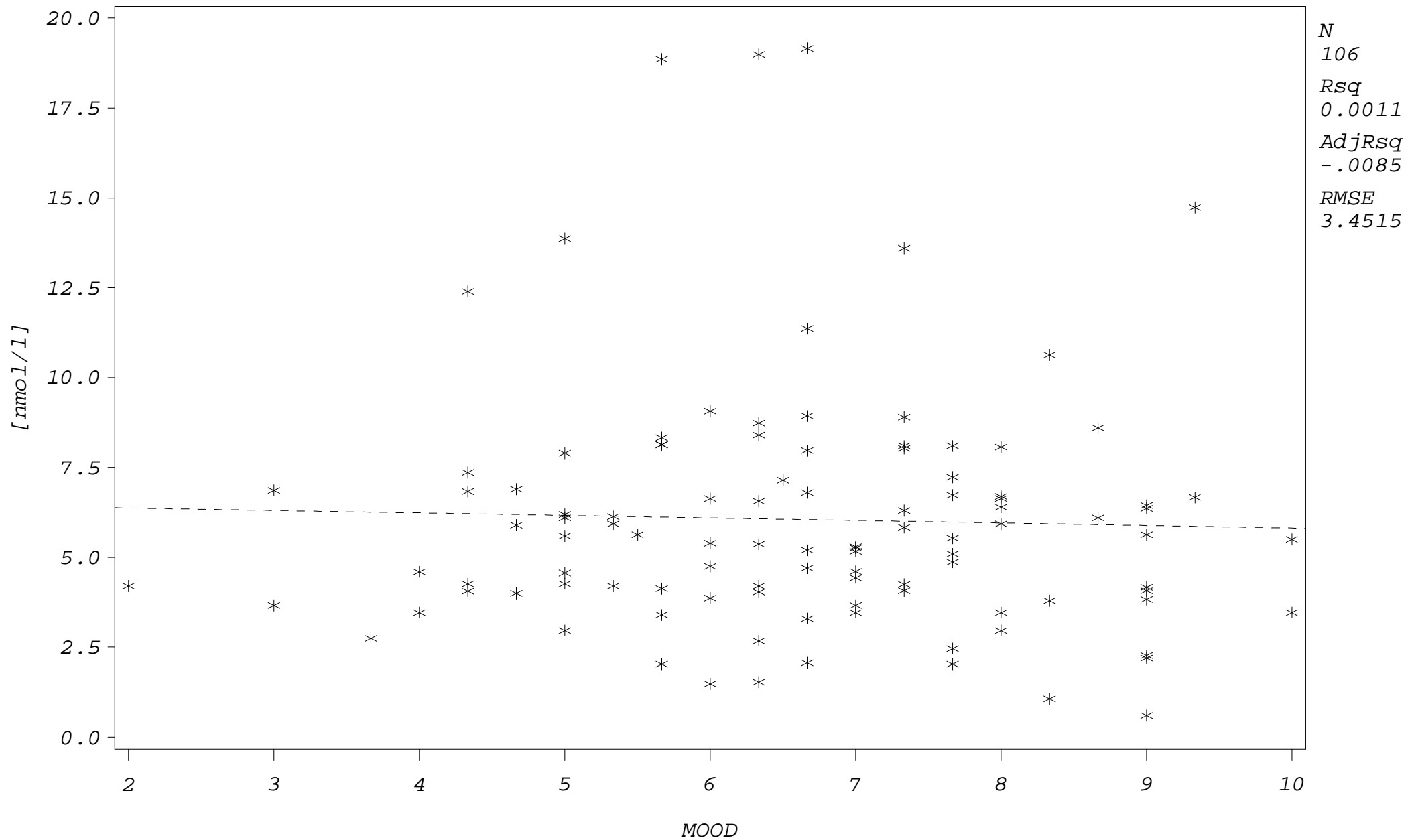
Study 2: cortisol levels * mood (by gender)

gender=1.00 sampling occasion=2



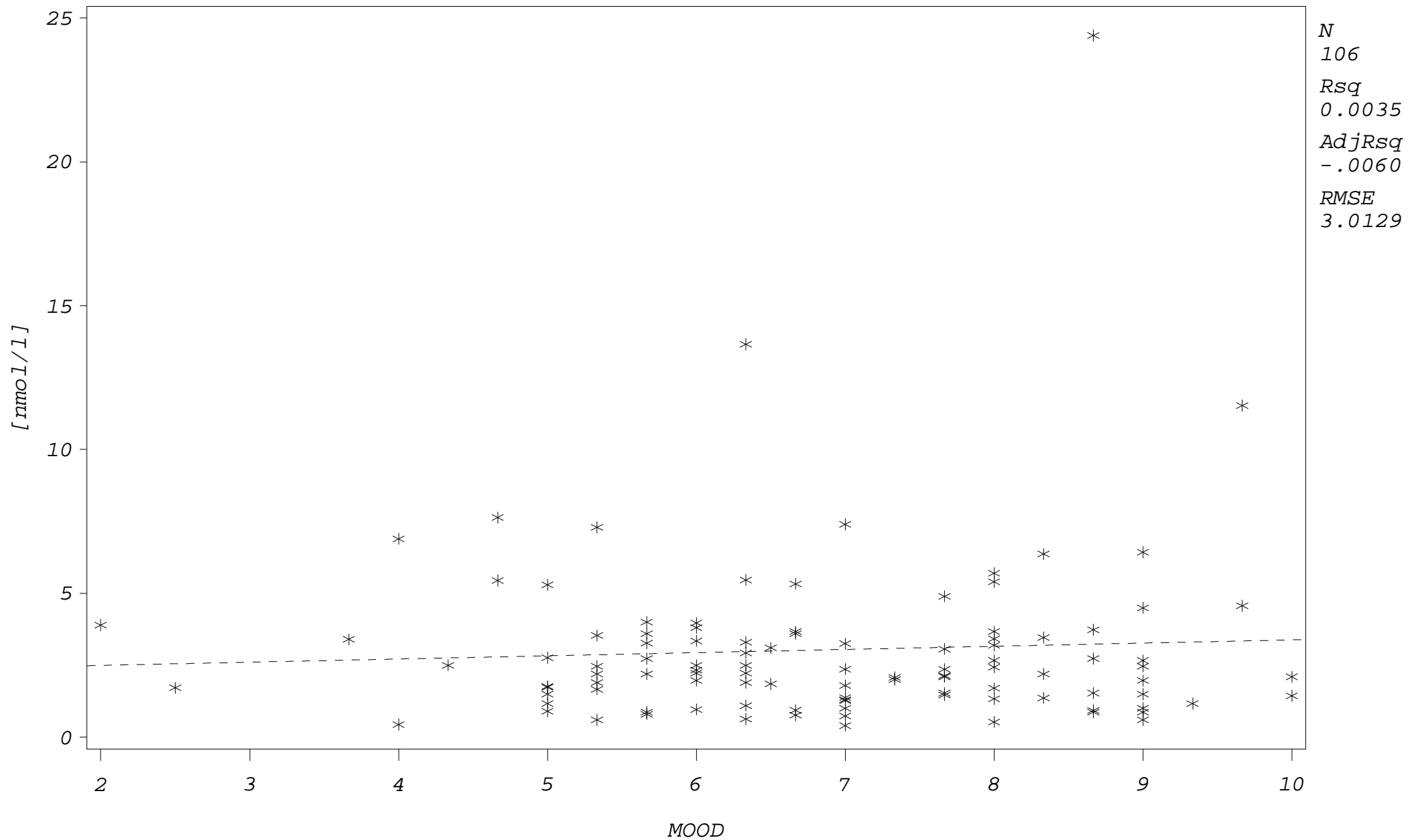
Study 2: cortisol levels * mood (by gender)

gender=1.00 sampling occasion=3



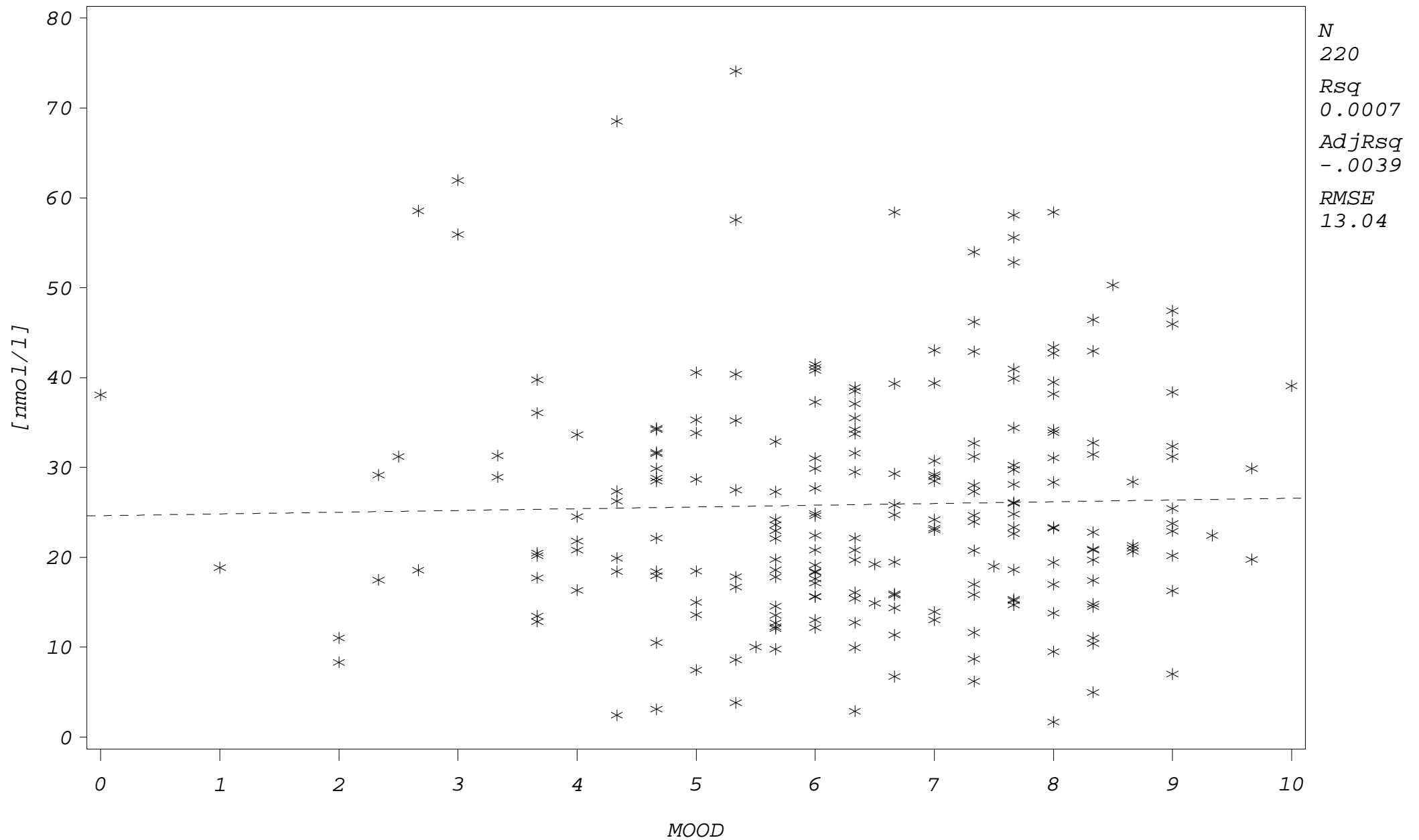
Study 2: cortisol levels * mood (by gender)

gender=1.00 sampling occasion=4



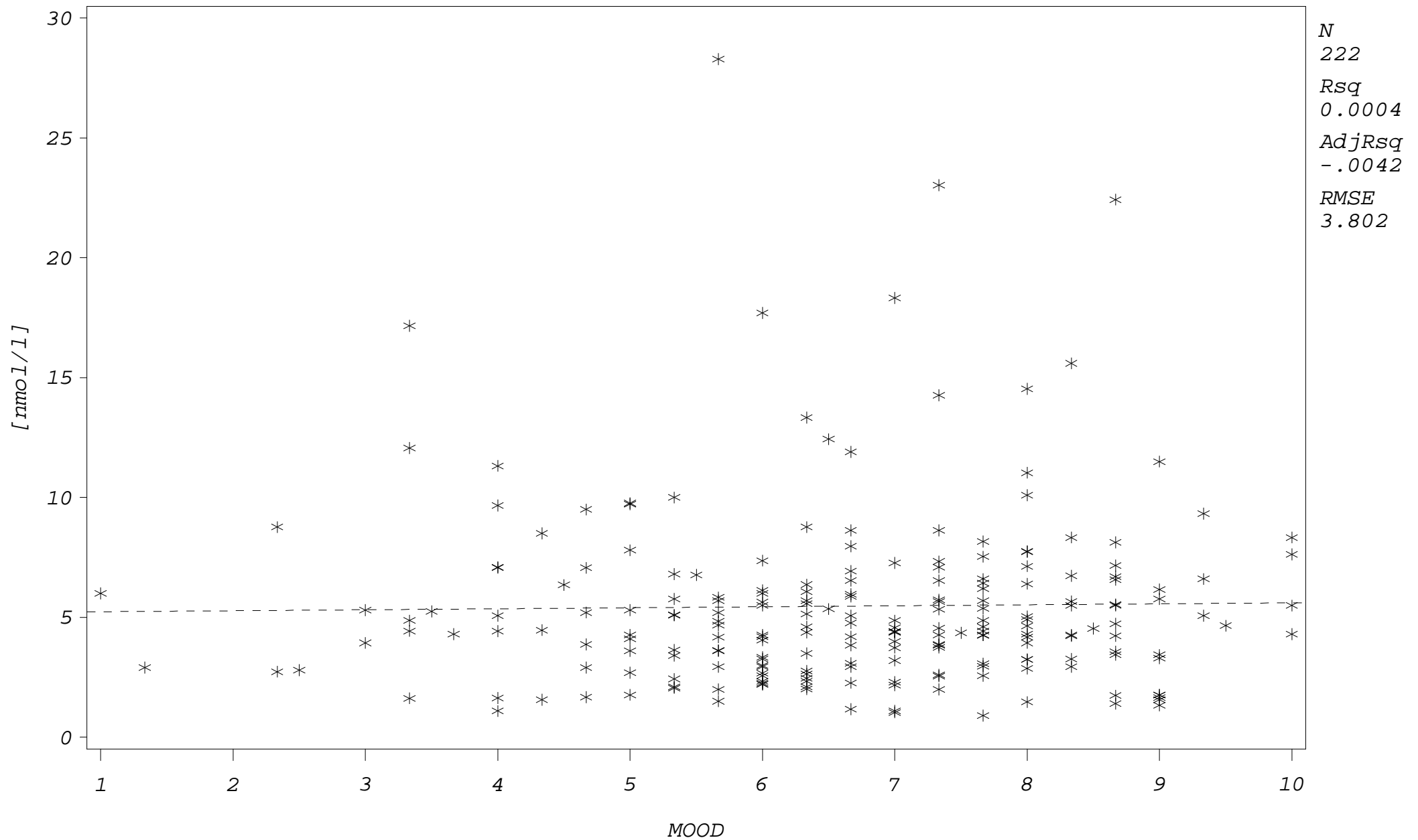
Study 2: cortisol levels * mood (by gender)

gender=2.00 sampling occasion=2



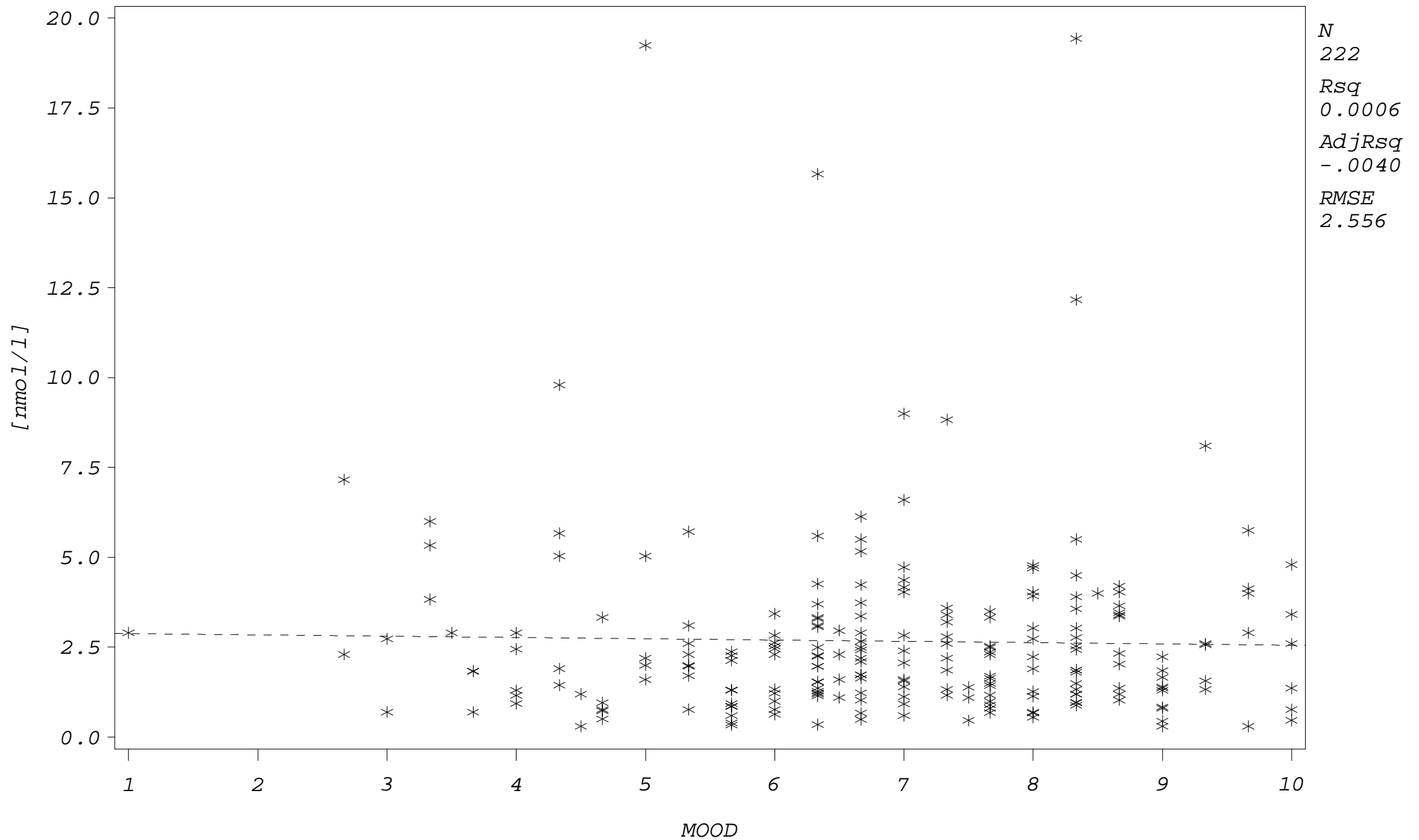
Study 2: cortisol levels * mood (by gender)

gender=2.00 sampling occasion=3



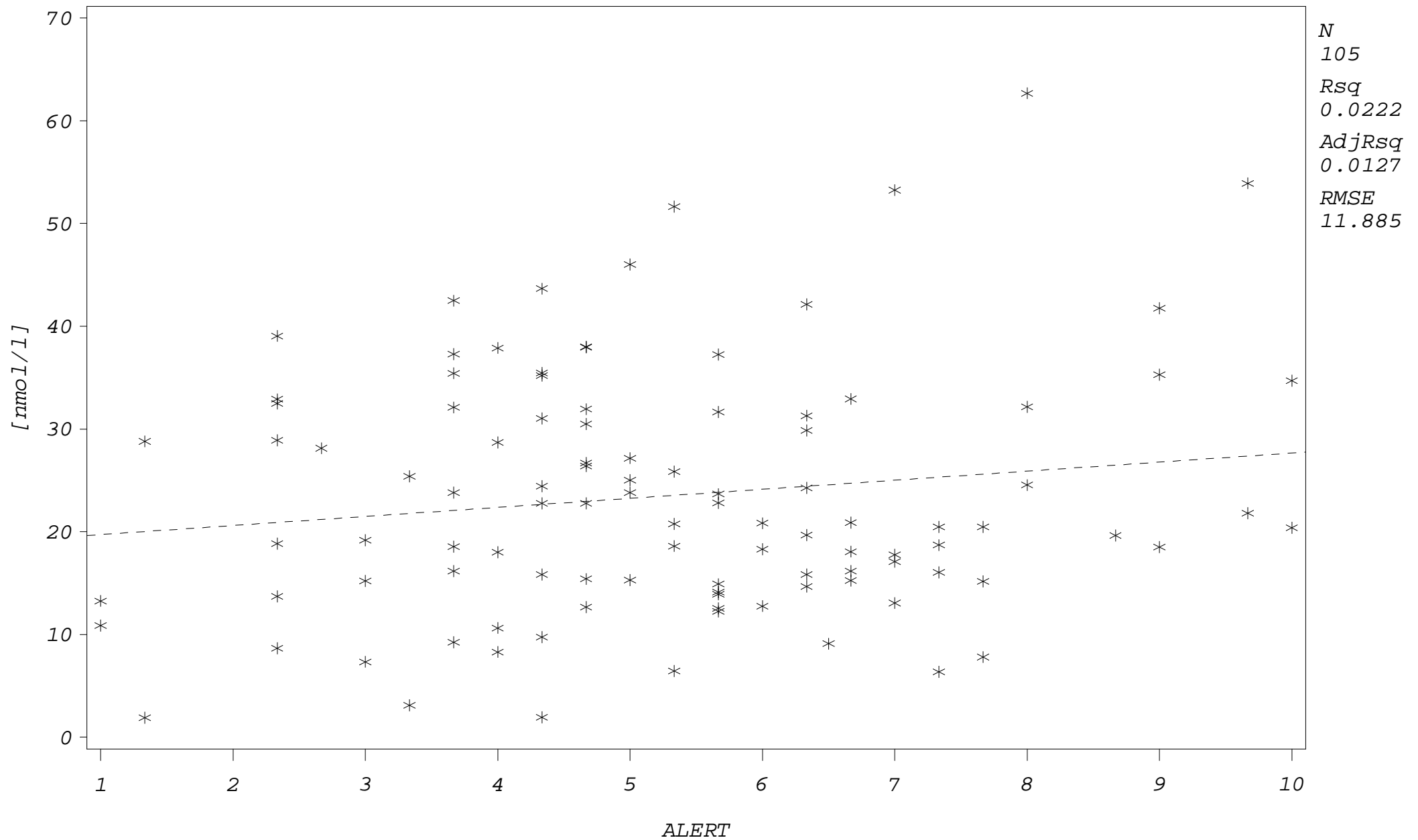
Study 2: cortisol levels * mood (by gender)

gender=2.00 sampling occasion=4



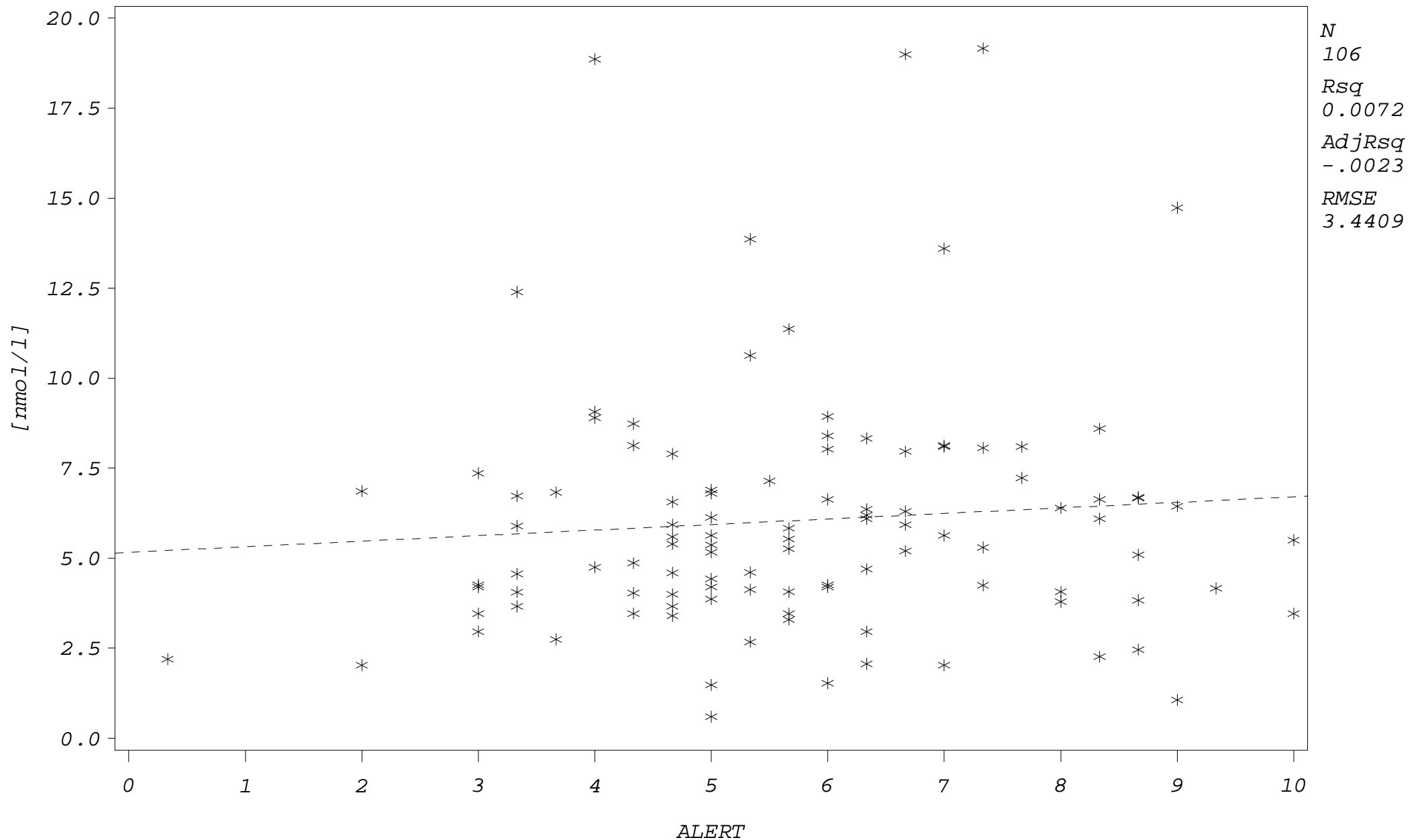
Study 2: cortisol levels * alertness (by gender)

gender=1.00 sampling occasion=2



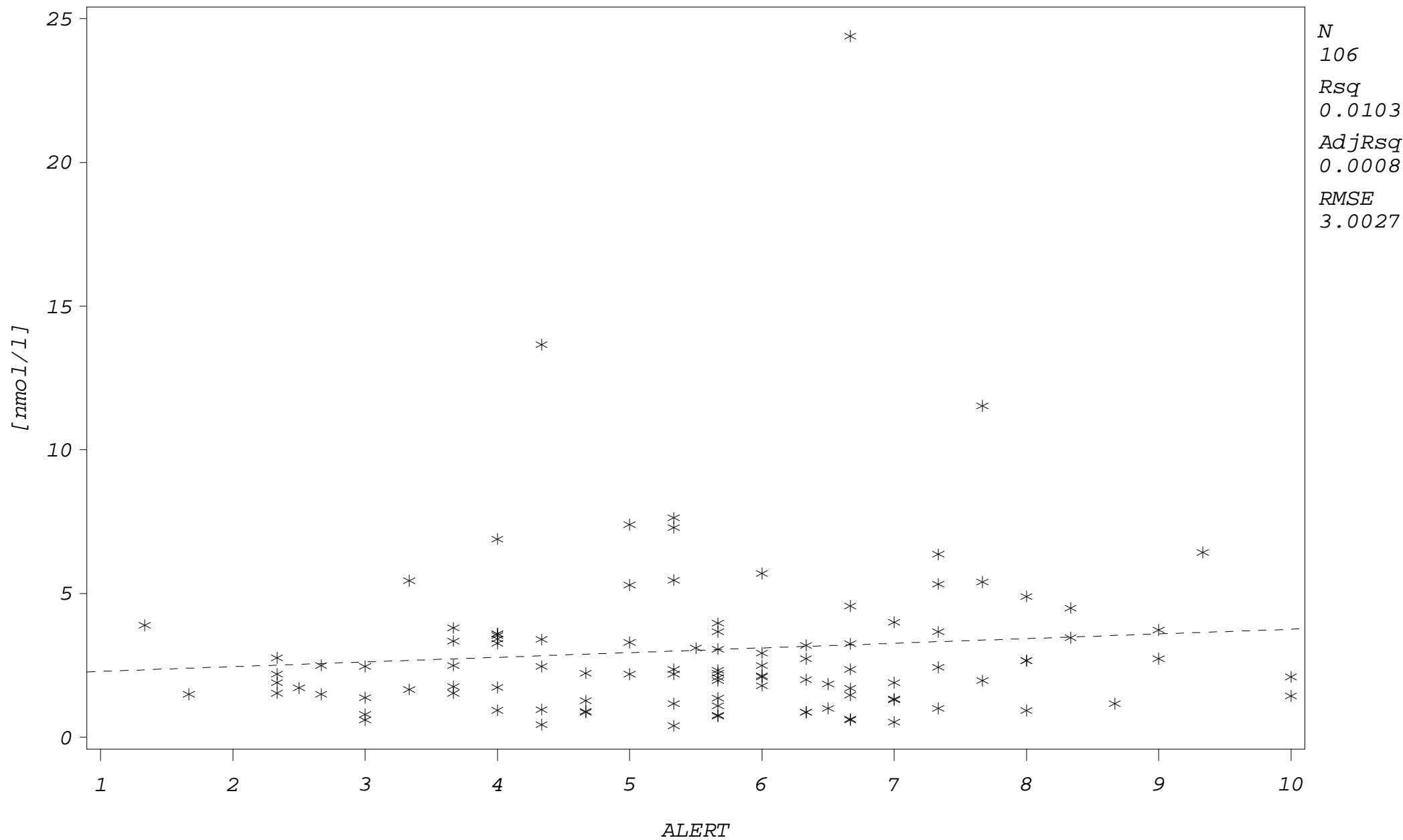
Study 2: cortisol levels * alertness (by gender)

gender=1.00 sampling occasion=3



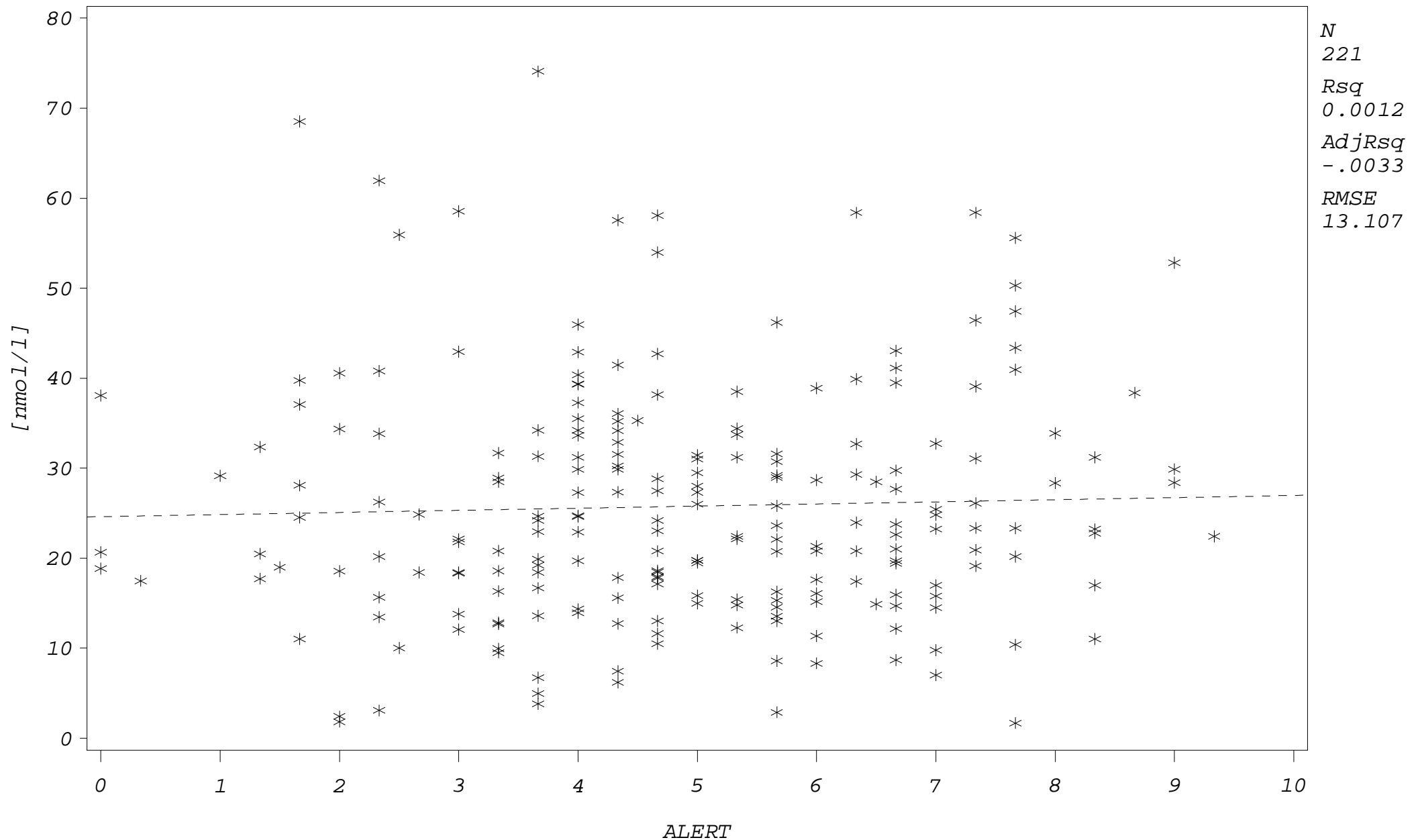
Study 2: cortisol levels * alertness (by gender)

gender=1.00 sampling occasion=4



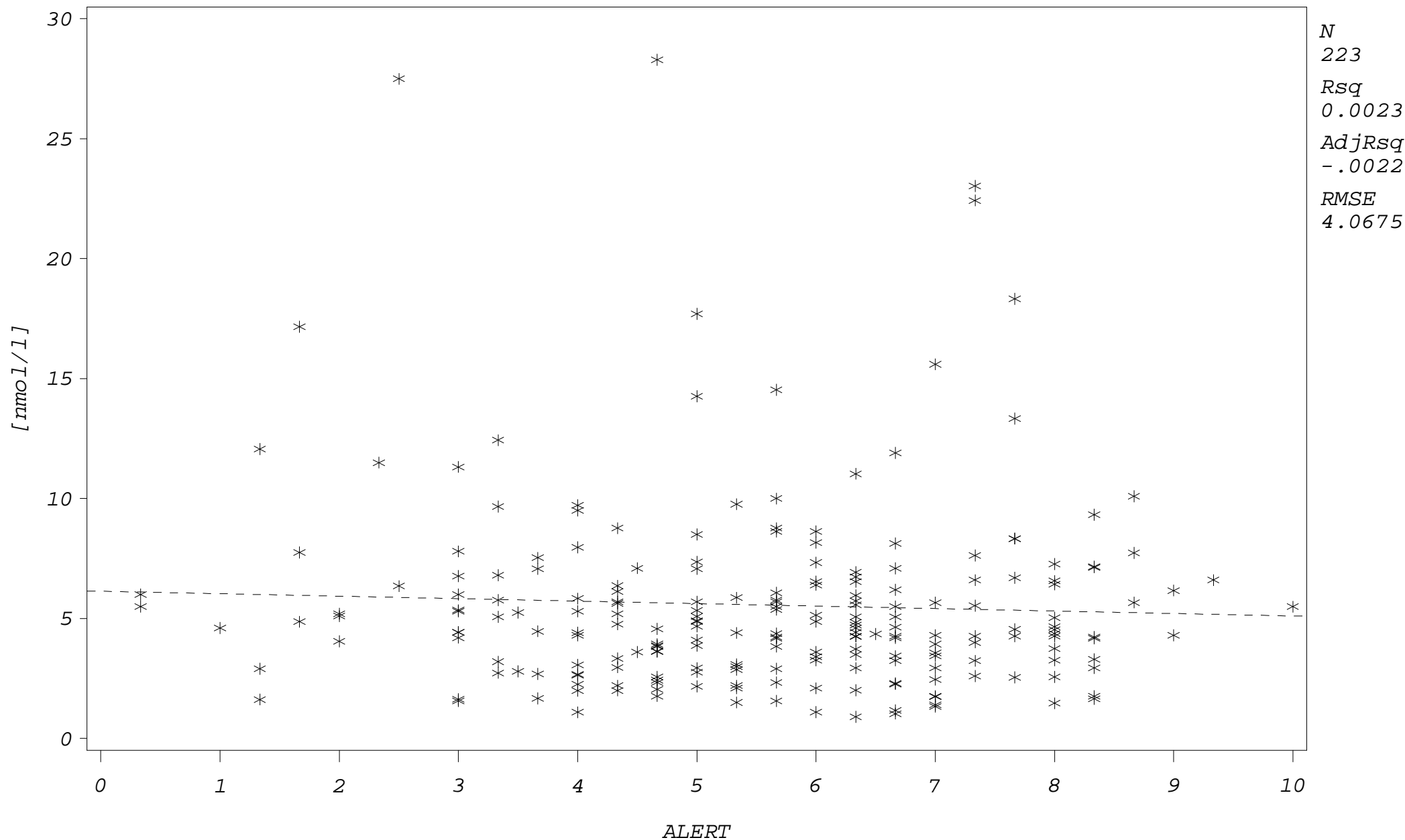
Study 2: cortisol levels * alertness (by gender)

gender=2.00 sampling occasion=2



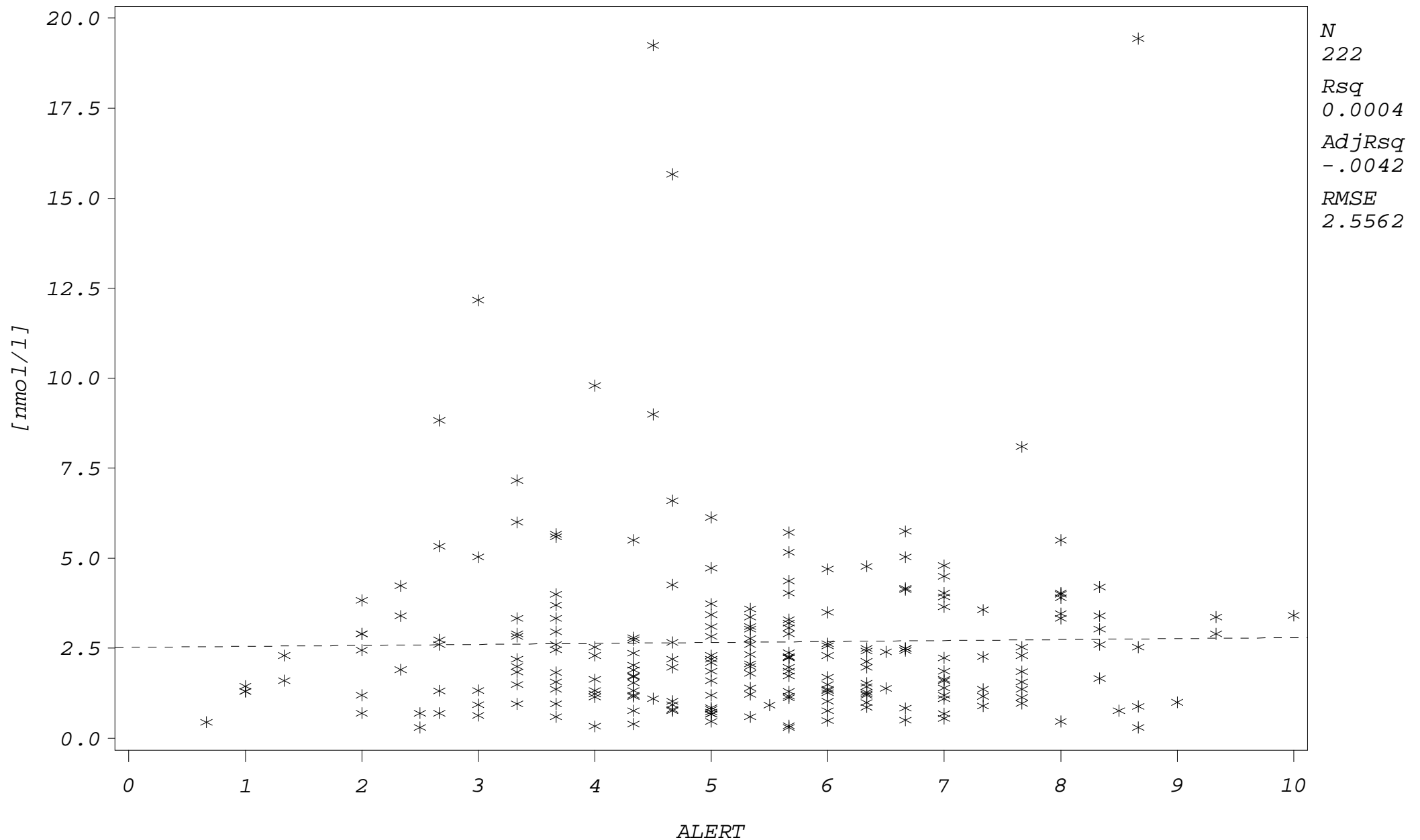
Study 2: cortisol levels * alertness (by gender)

gender=2.00 sampling occasion=3



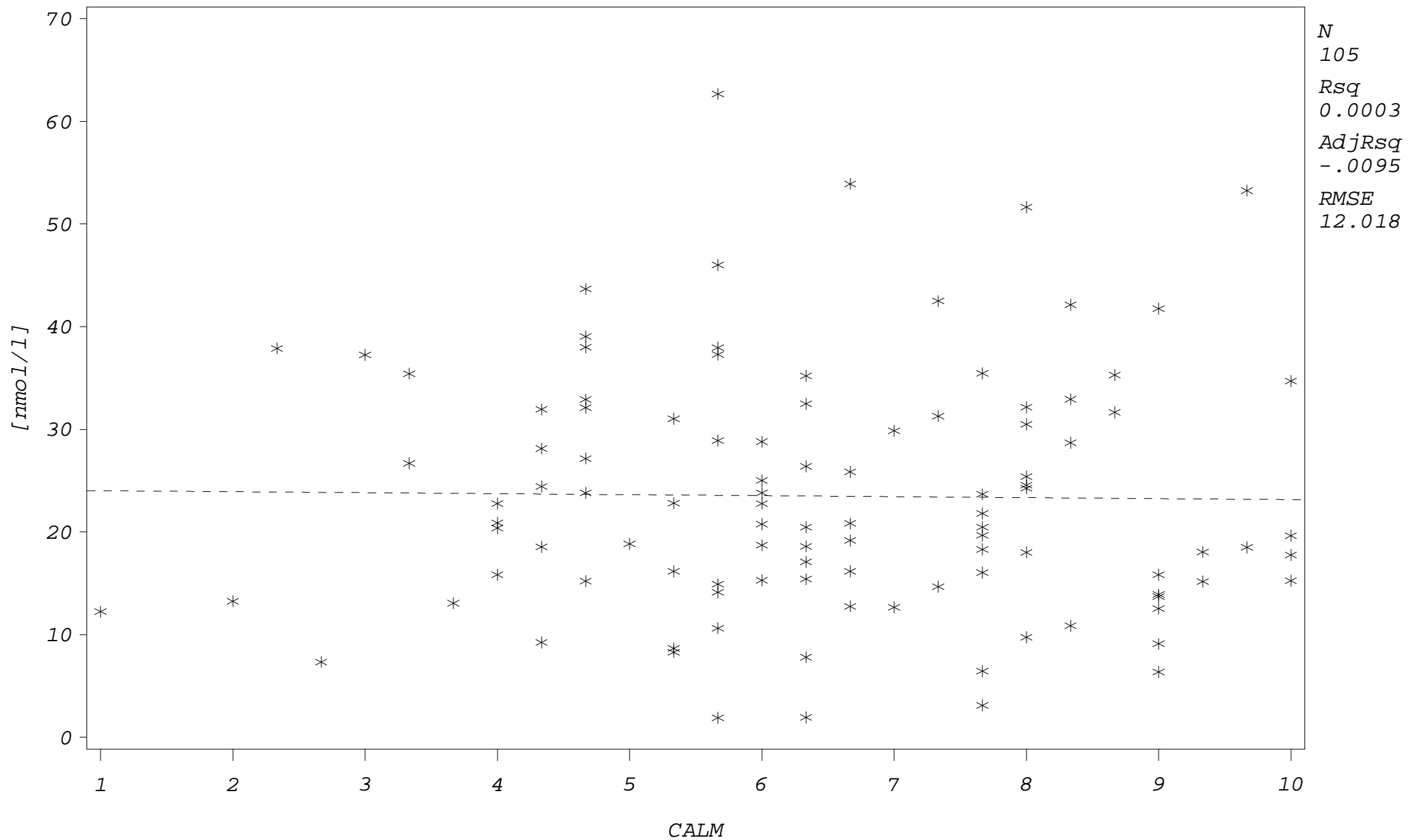
Study 2: cortisol levels * alertness (by gender)

gender=2.00 sampling occasion=4



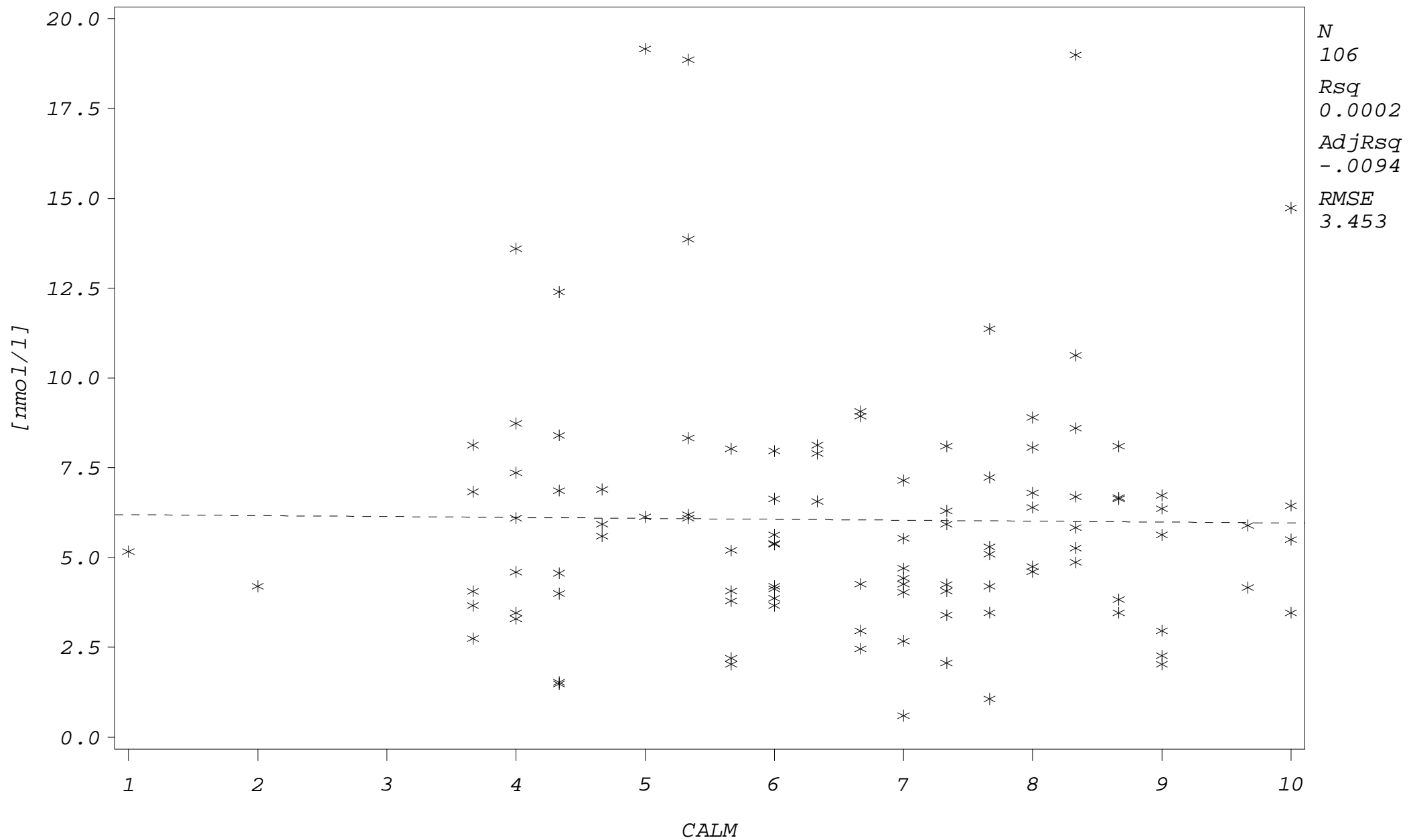
Study 2: cortisol levels * calmness (by gender)

gender=1.00 sampling occasion=2



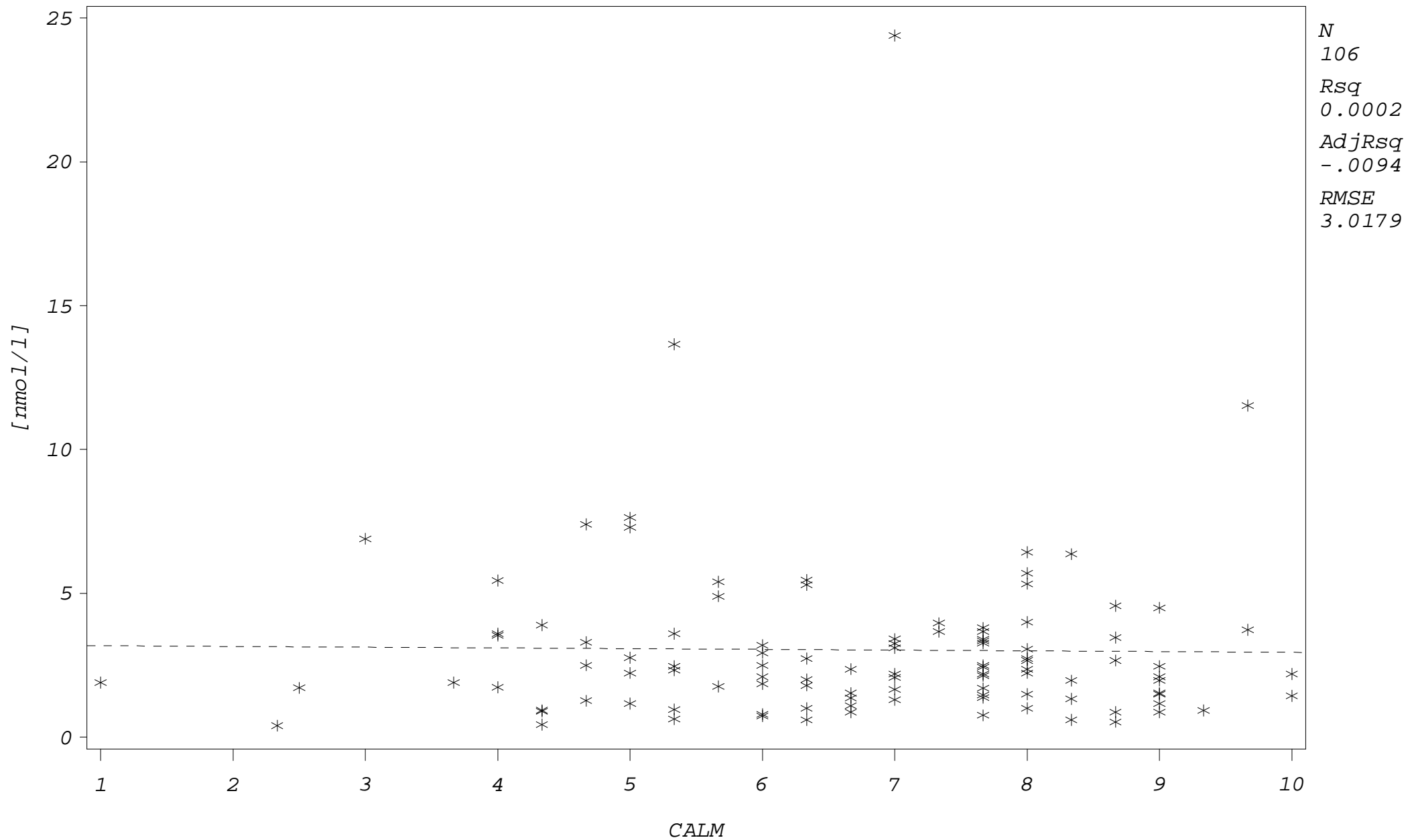
Study 2: cortisol levels * calmness (by gender)

gender=1.00 sampling occasion=3



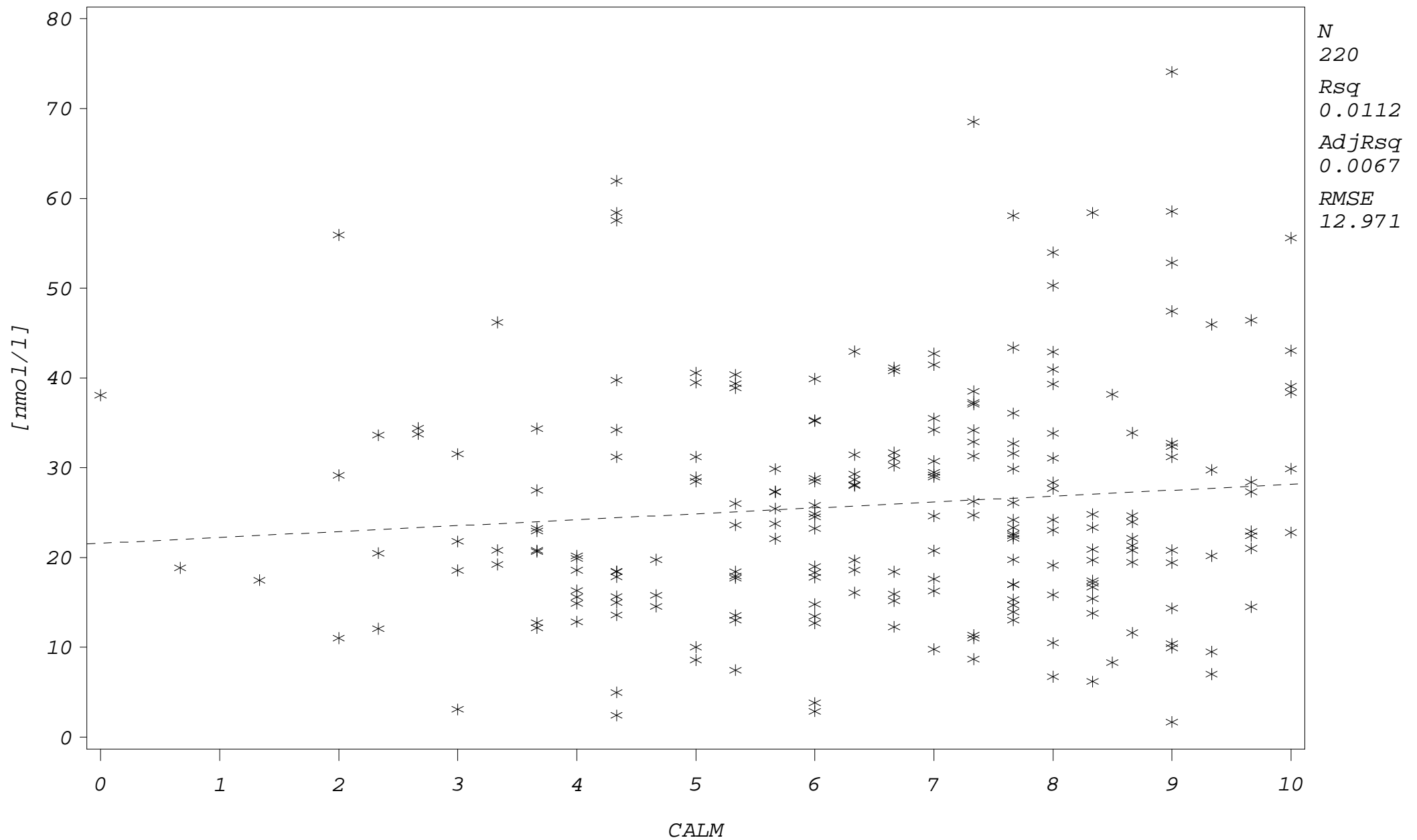
Study 2: cortisol levels * calmness (by gender)

gender=1.00 sampling occasion=4



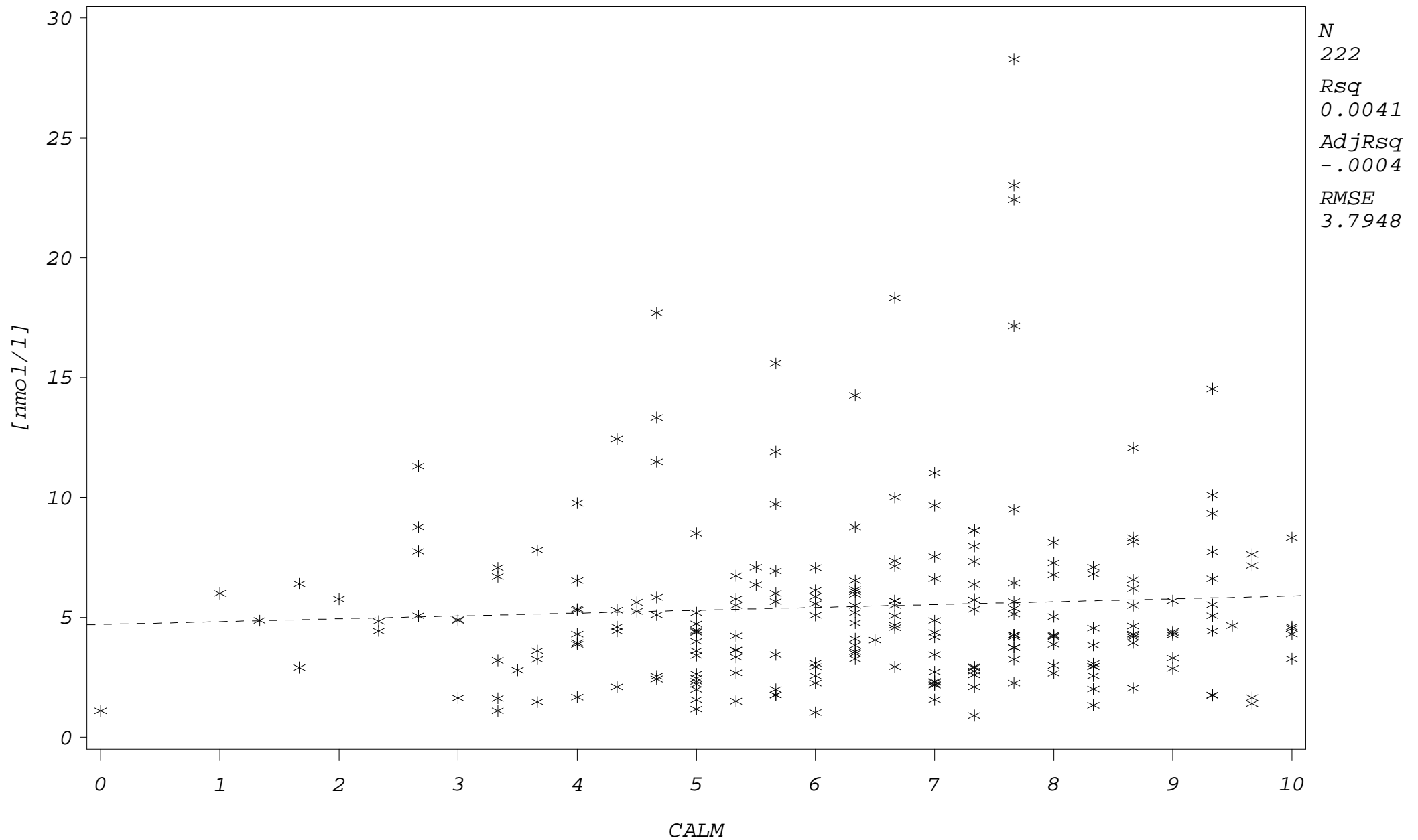
Study 2: cortisol levels * calmness (by gender)

gender=2.00 sampling occasion=2



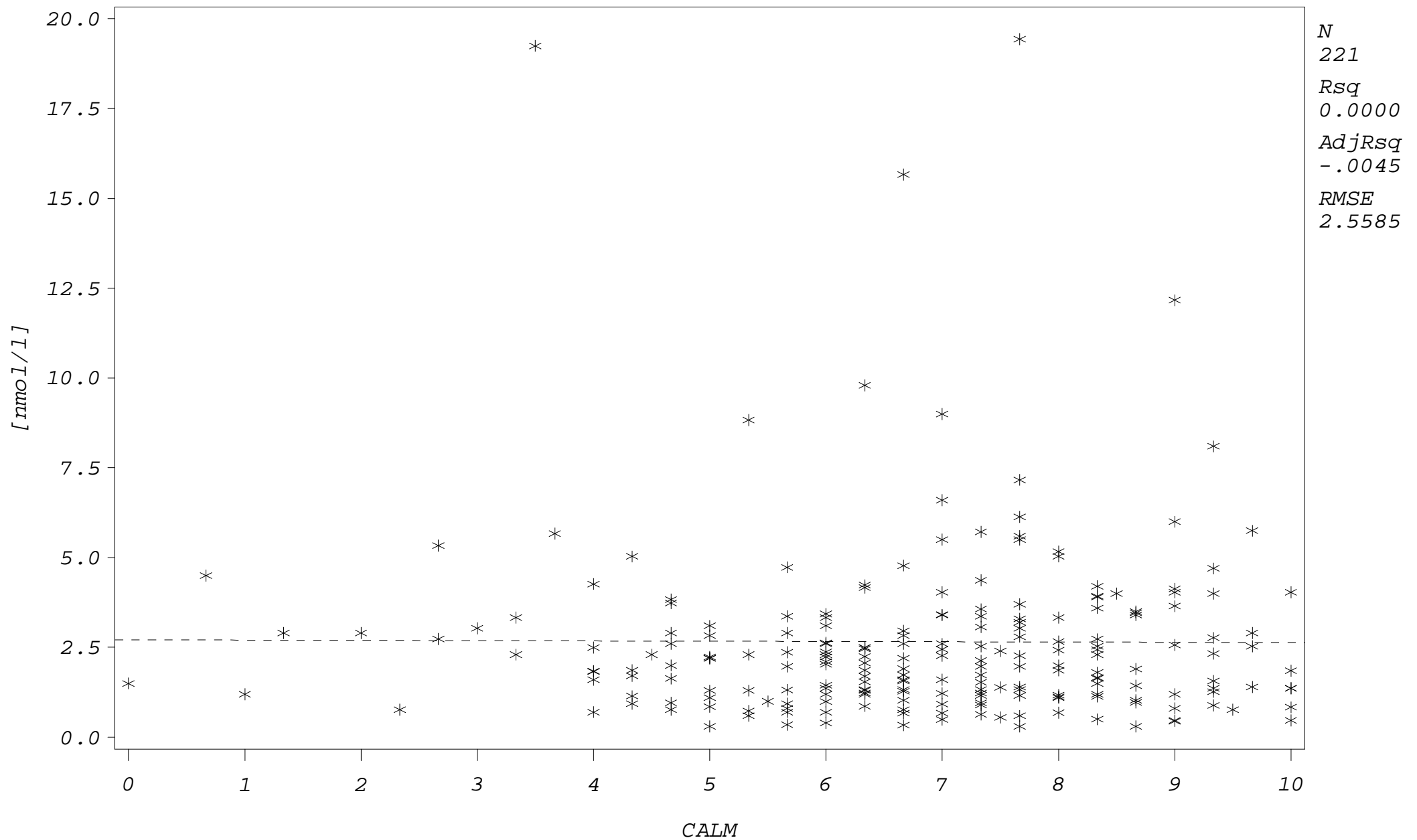
Study 2: cortisol levels * calmness (by gender)

gender=2.00 sampling occasion=3



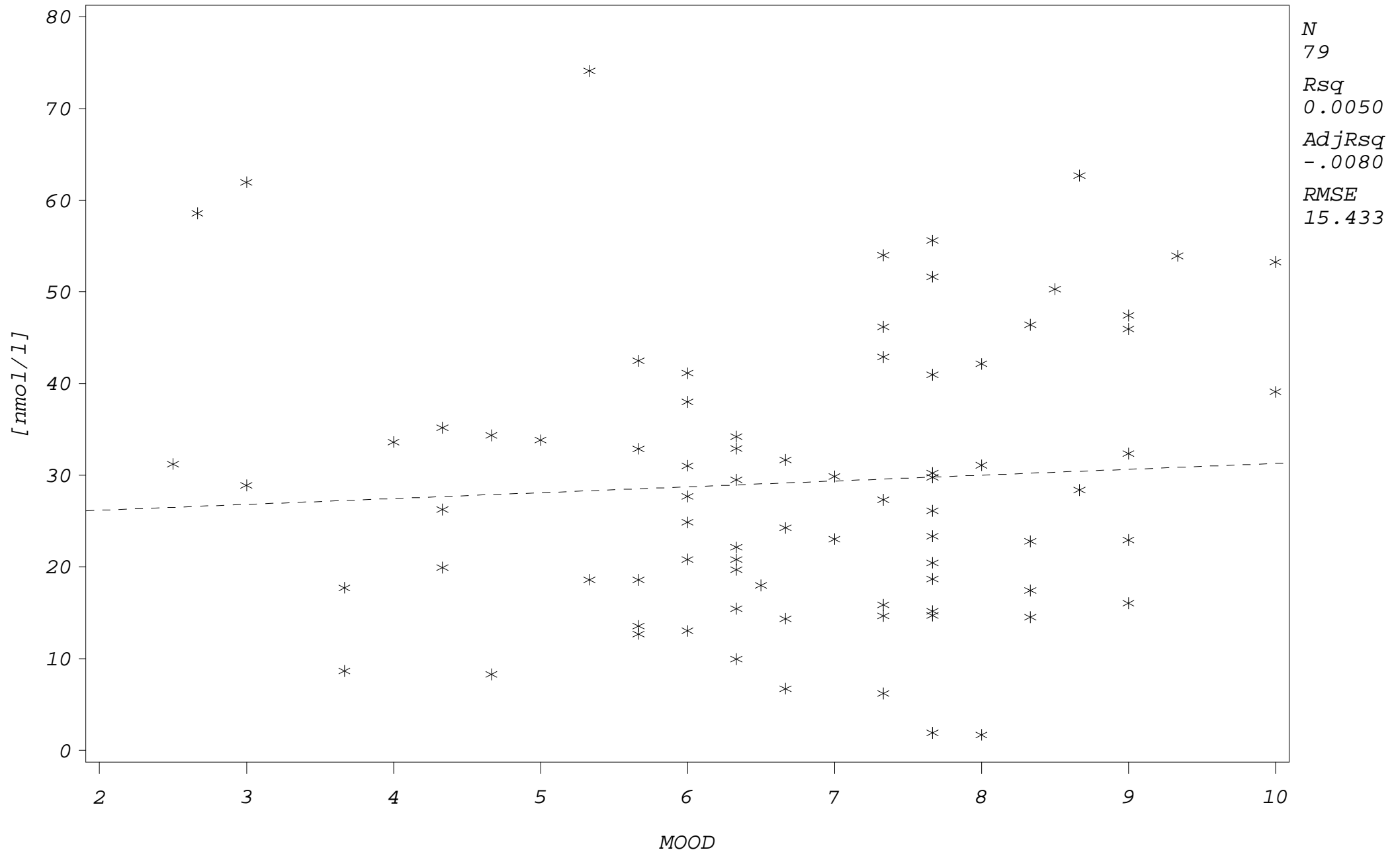
Study 2: cortisol levels * calmness (by gender)

gender=2.00 sampling occasion=4



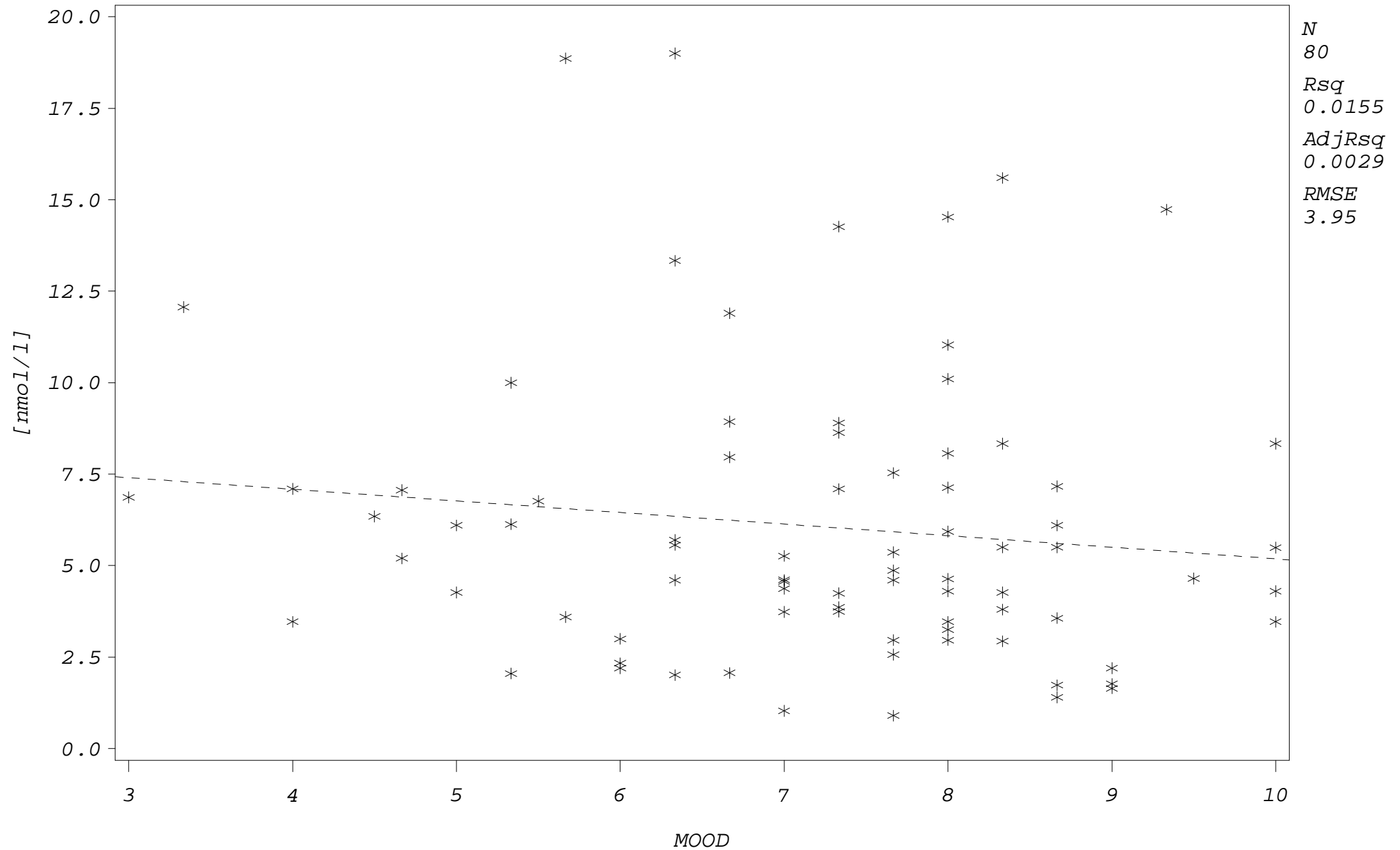
Study 2: cortisol levels * mood (by occupational group)

occupational group=1.00 sampling occasion=2



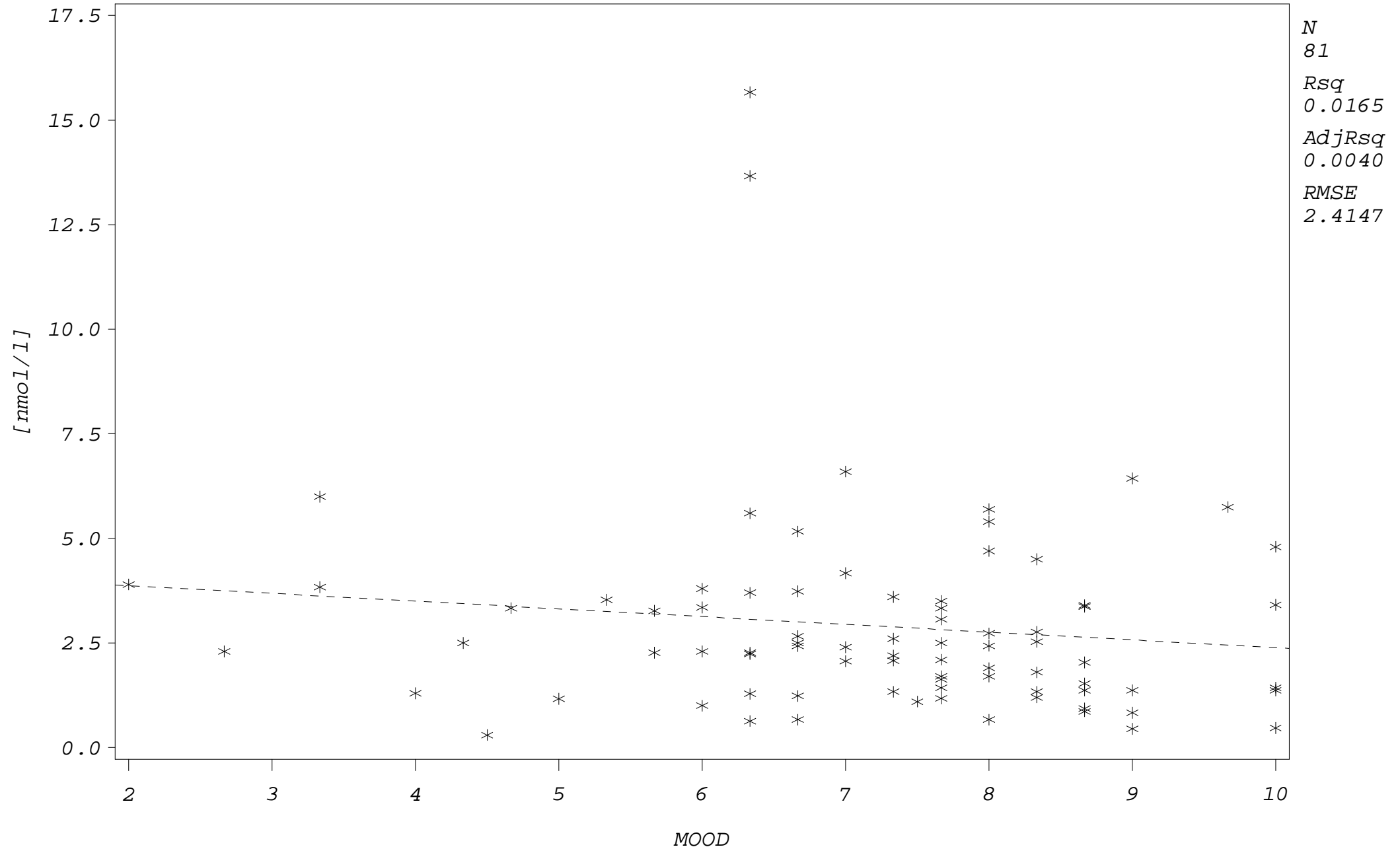
Study 2: cortisol levels * mood (by occupational group)

occupational group=1.00 sampling occasion=3



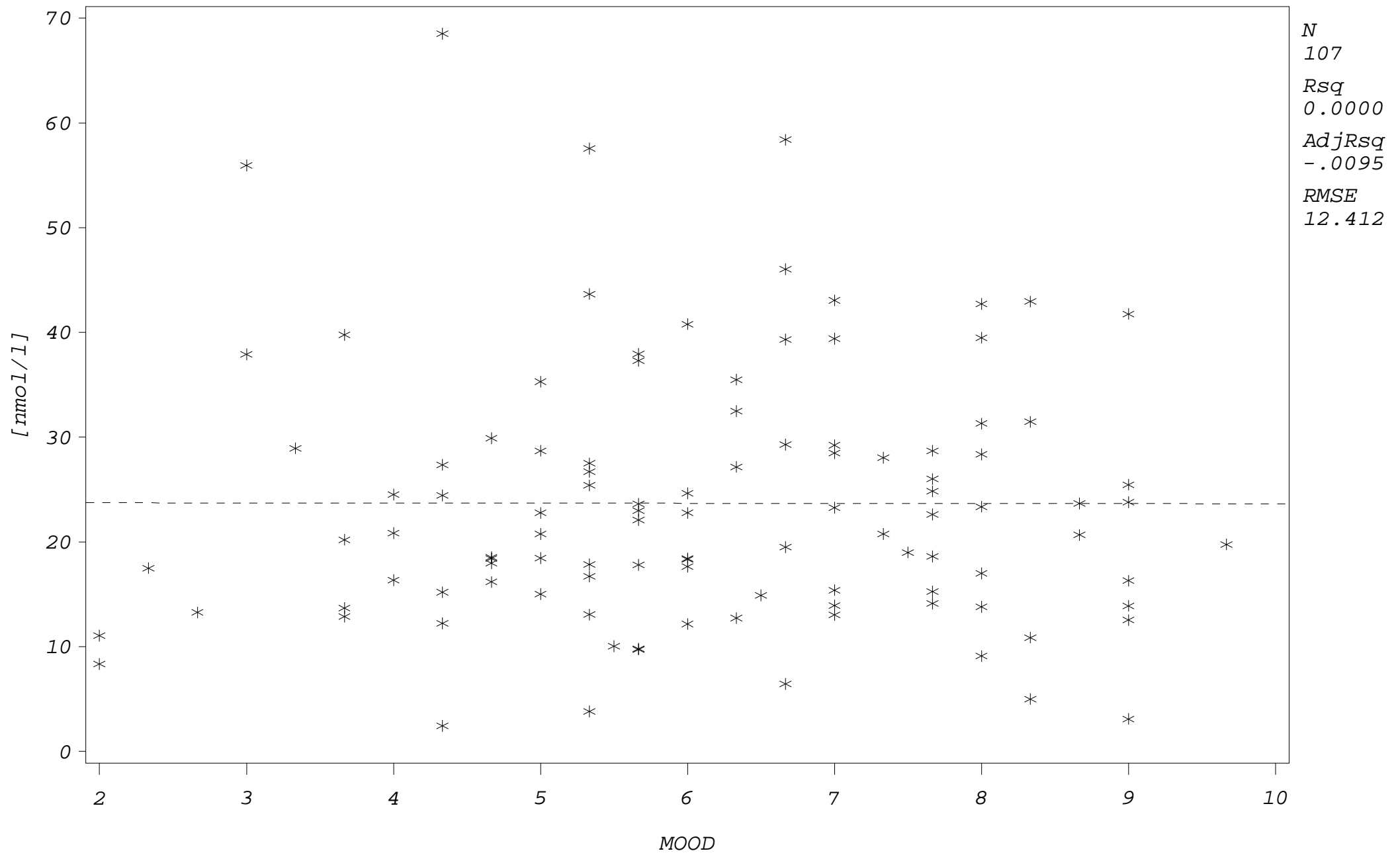
Study 2: cortisol levels * mood (by occupational group)

occupational group=1.00 sampling occasion=4



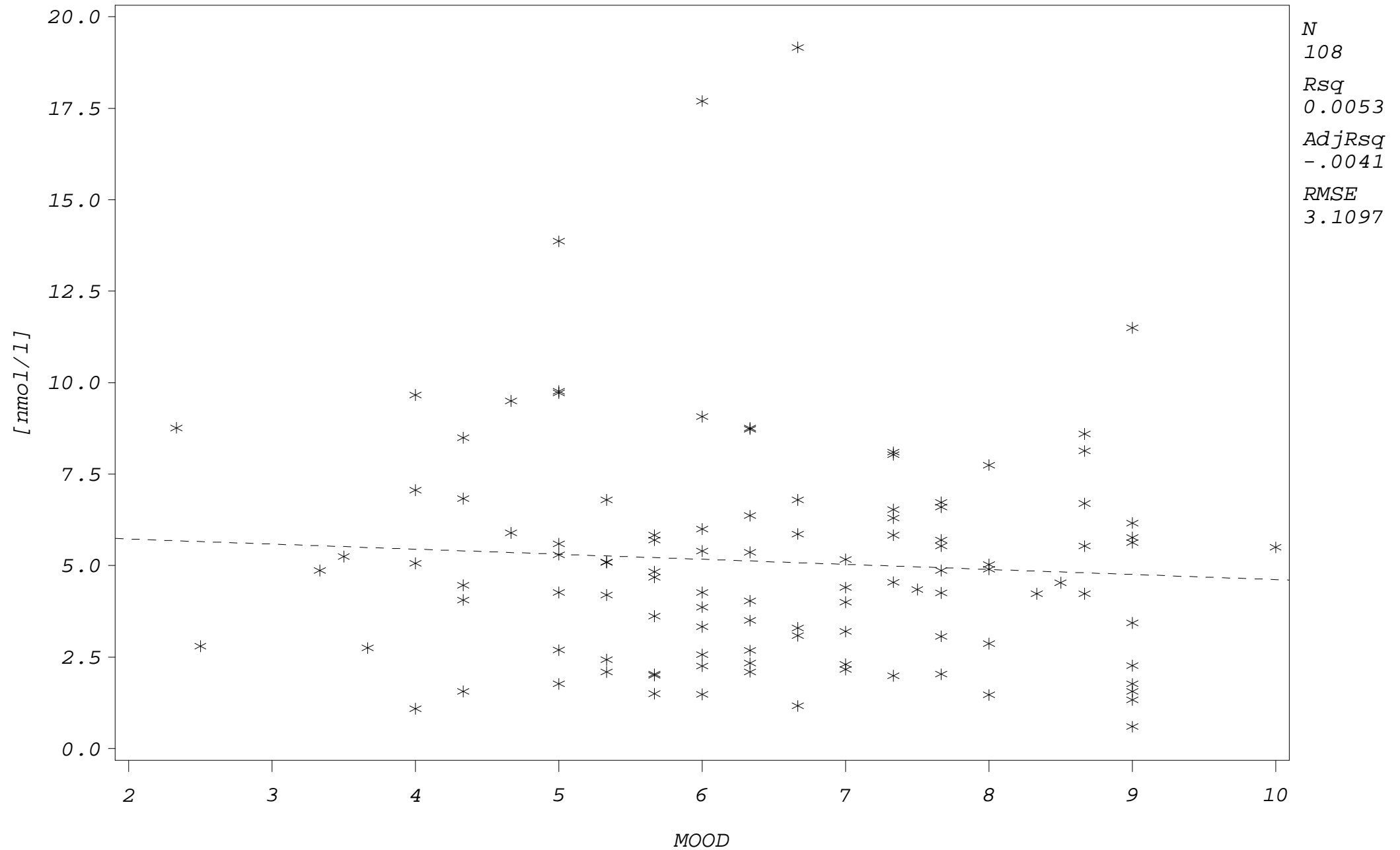
Study 2: cortisol levels * mood (by occupational group)

occupational group=2.00 sampling occasion=2



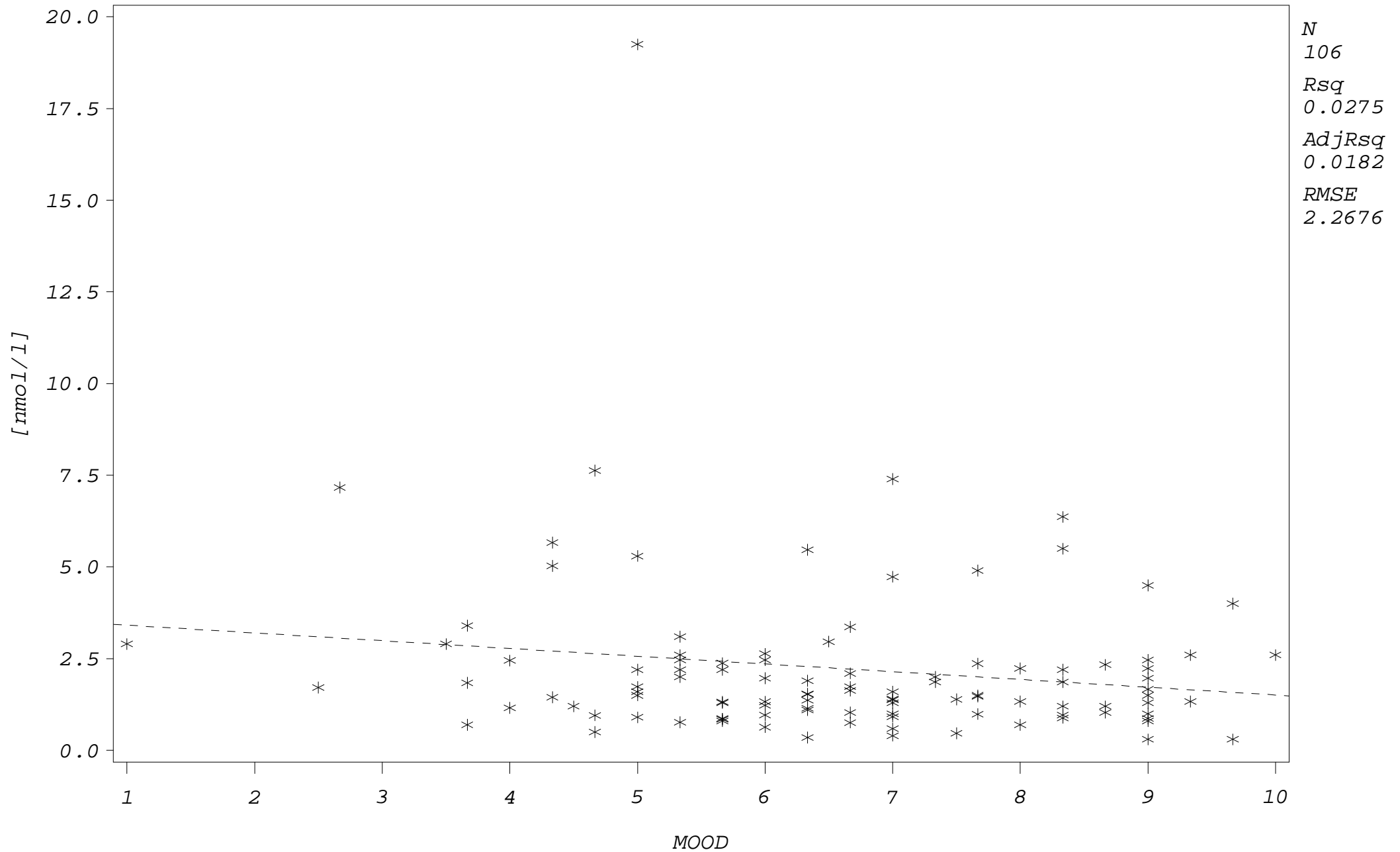
Study 2: cortisol levels * mood (by occupational group)

occupational group=2.00 sampling occasion=3



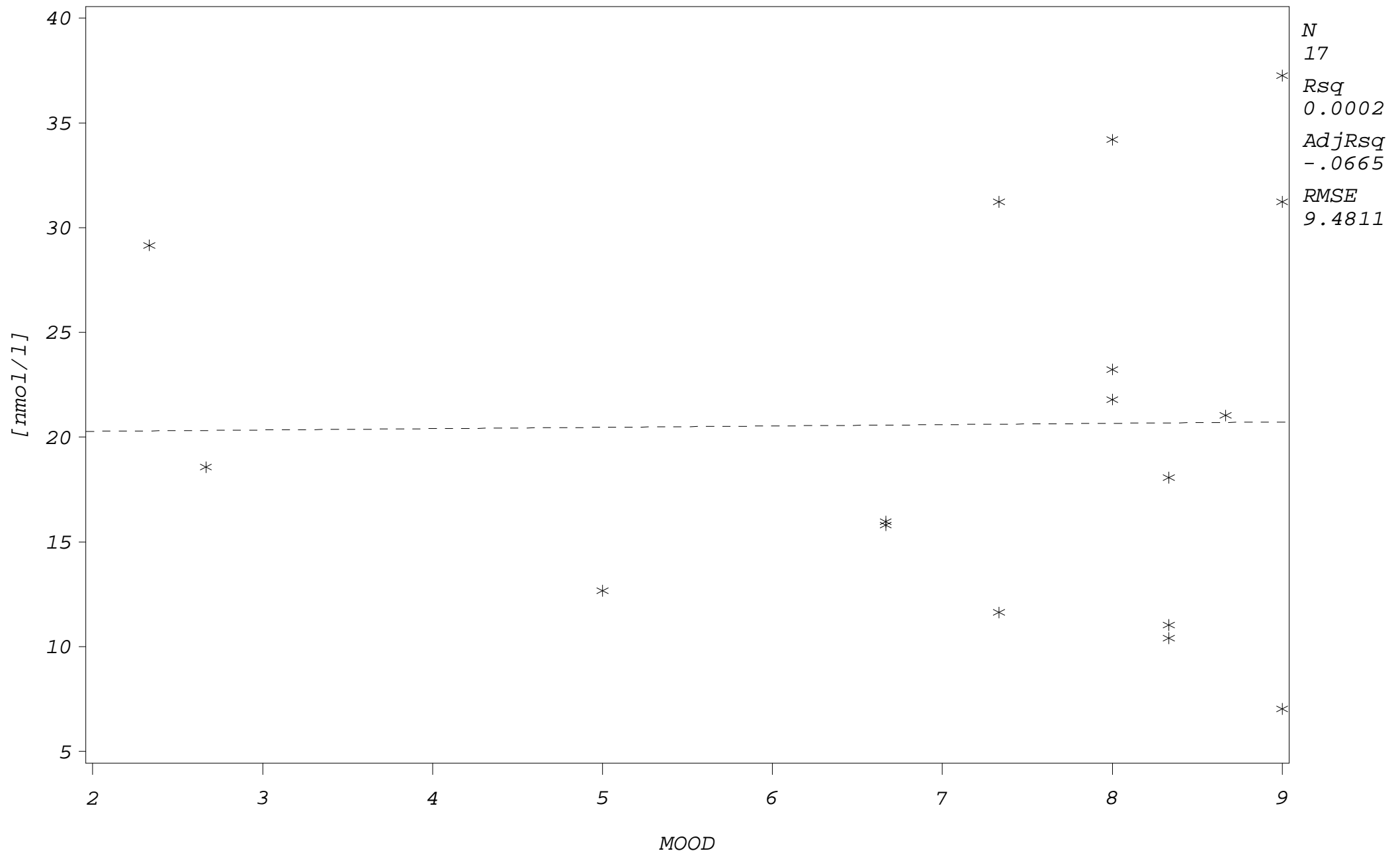
Study 2: cortisol levels * mood (by occupational group)

occupational group=2.00 sampling occasion=4



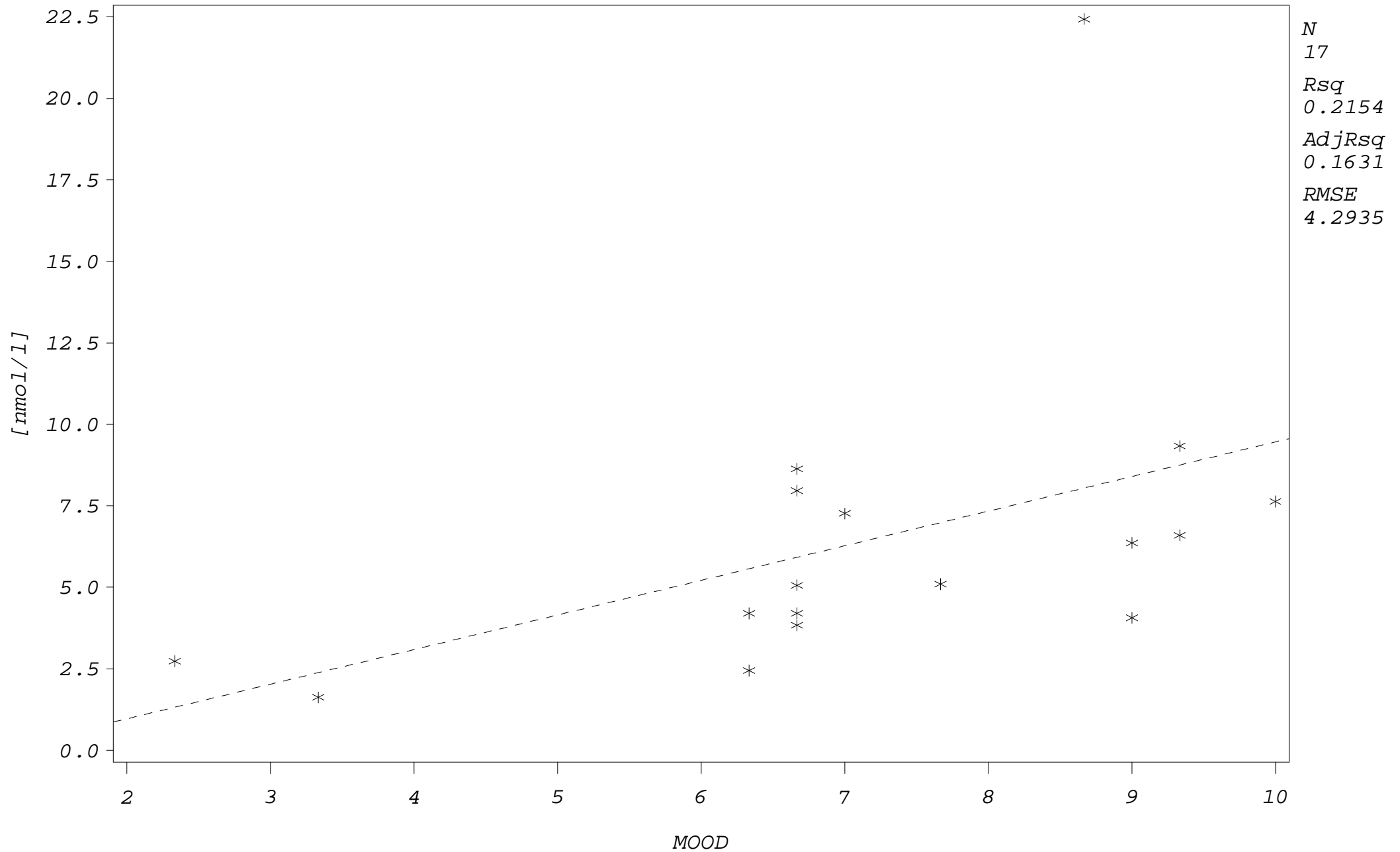
Study 2: cortisol levels * mood (by occupational group)

occupational group=3.00 sampling occasion=2



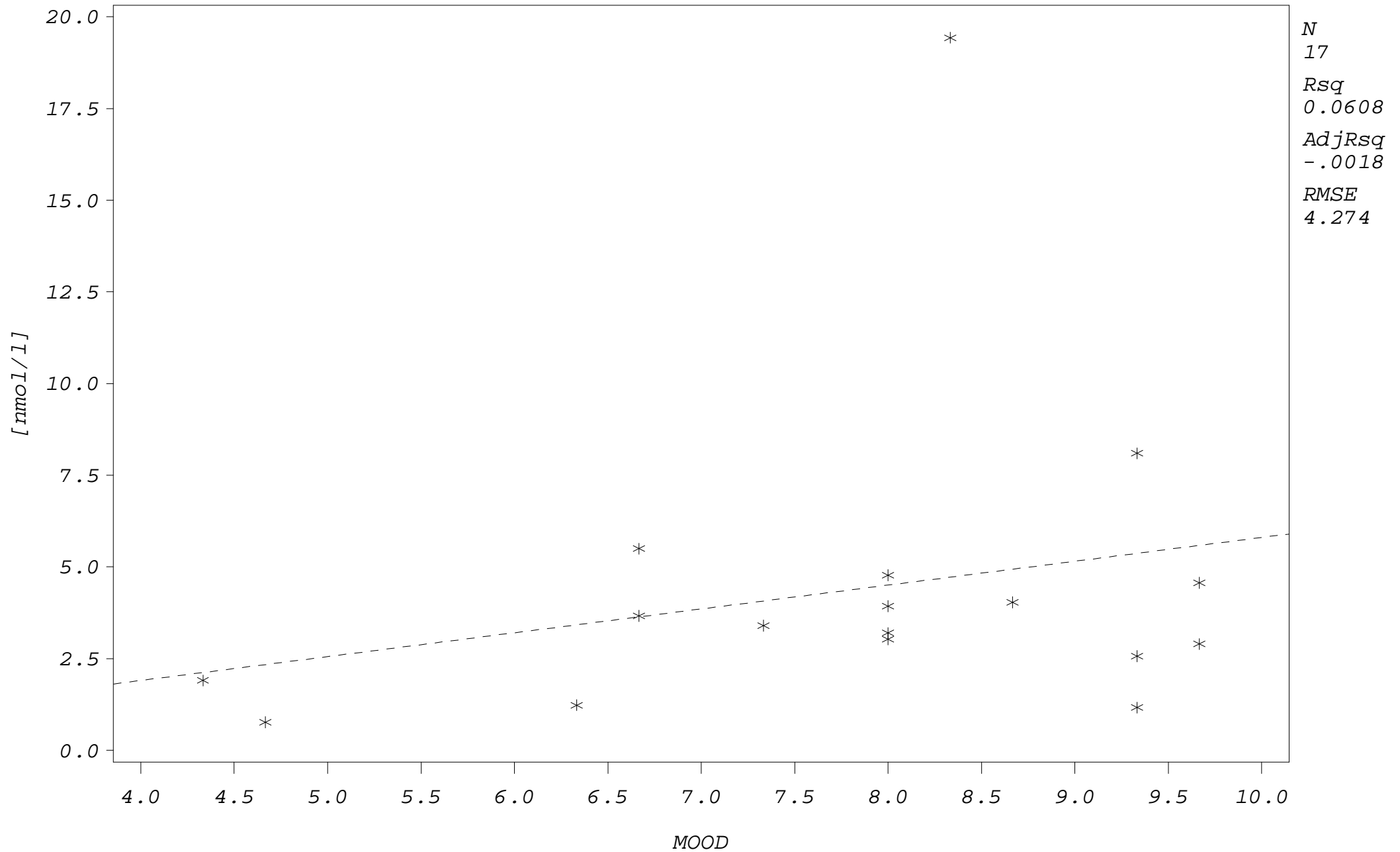
Study 2: cortisol levels * mood (by occupational group)

occupational group=3.00 sampling occasion=3



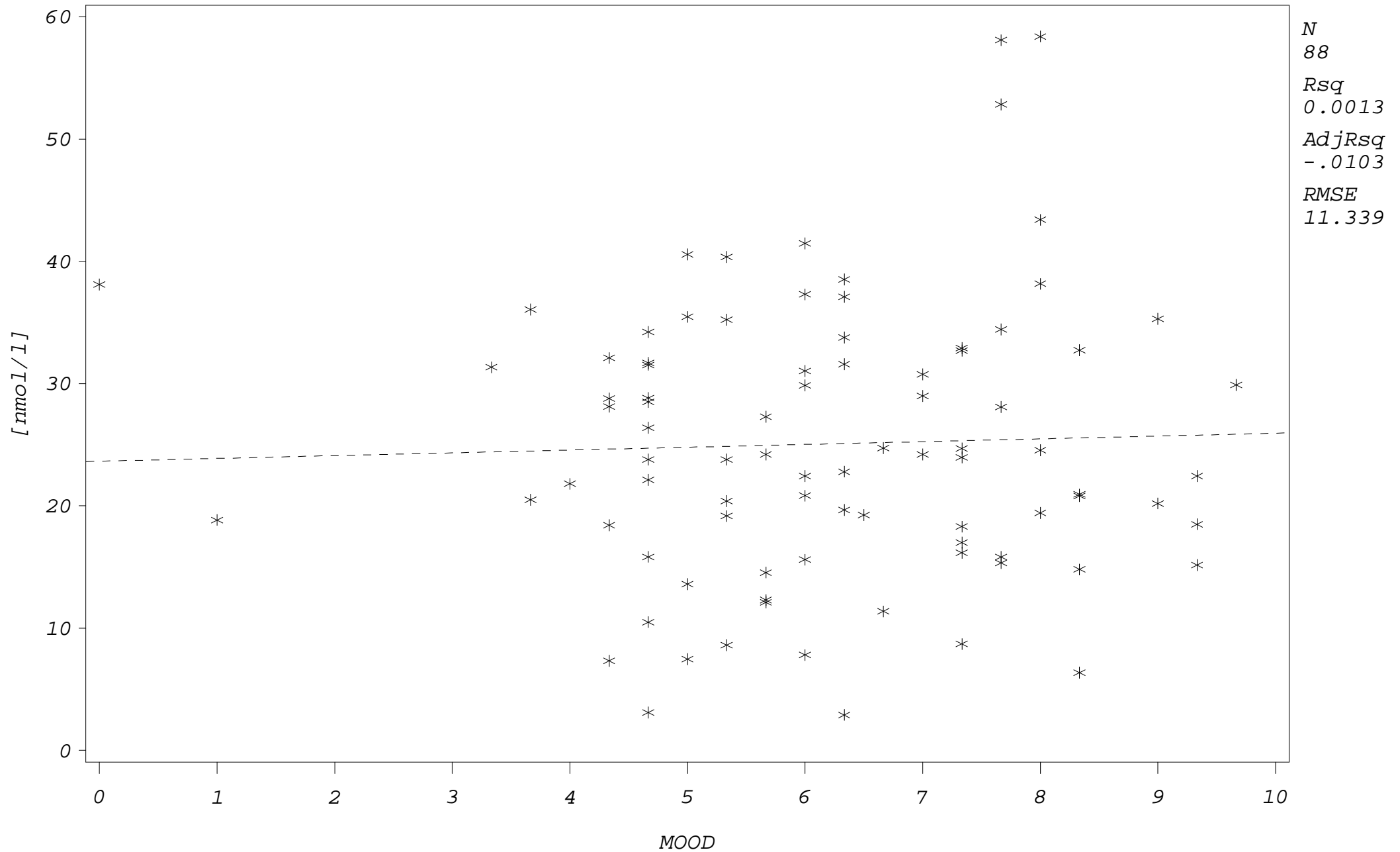
Study 2: cortisol levels * mood (by occupational group)

occupational group=3.00 sampling occasion=4



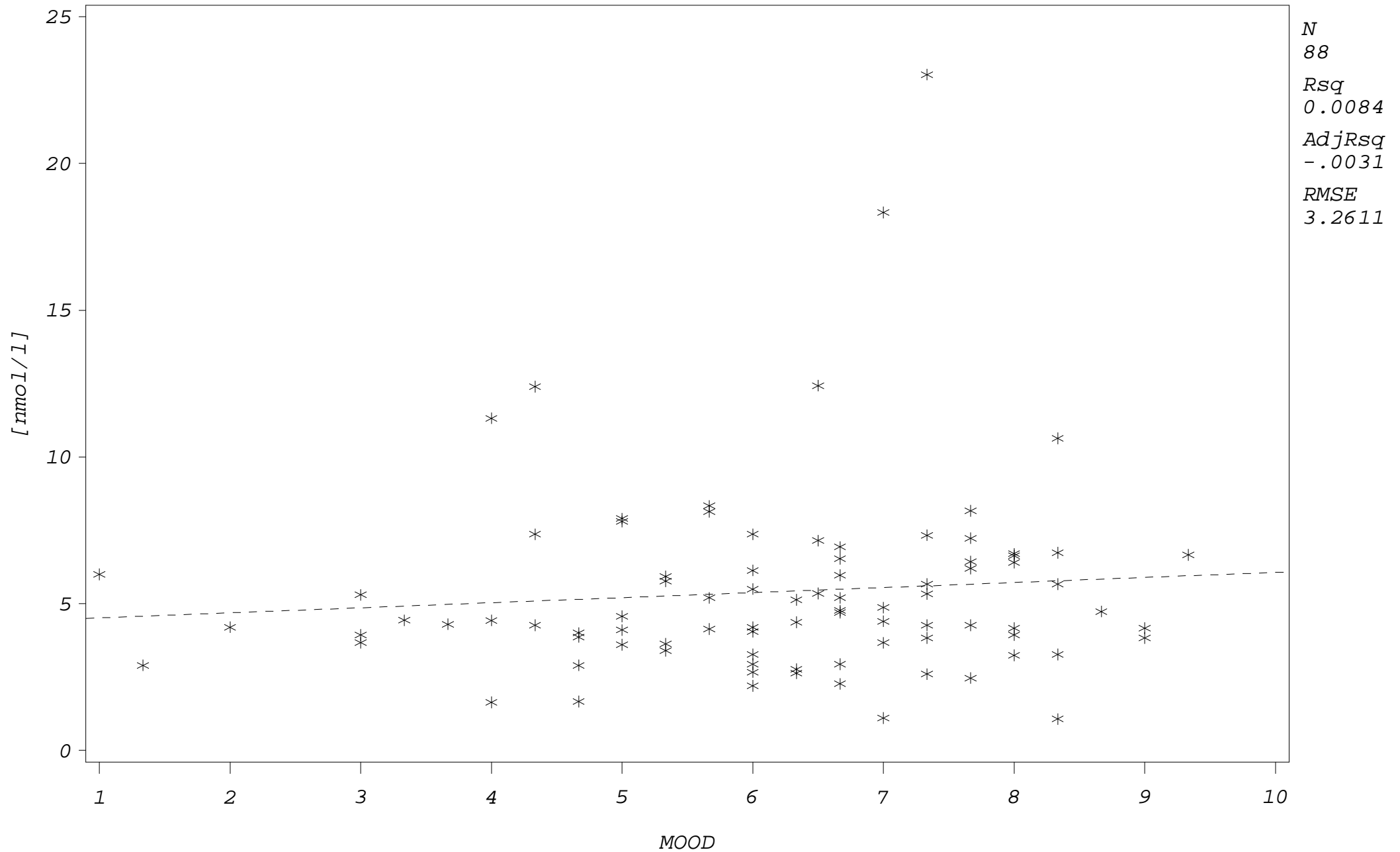
Study 2: cortisol levels * mood (by occupational group)

occupational group=4.00 sampling occasion=2



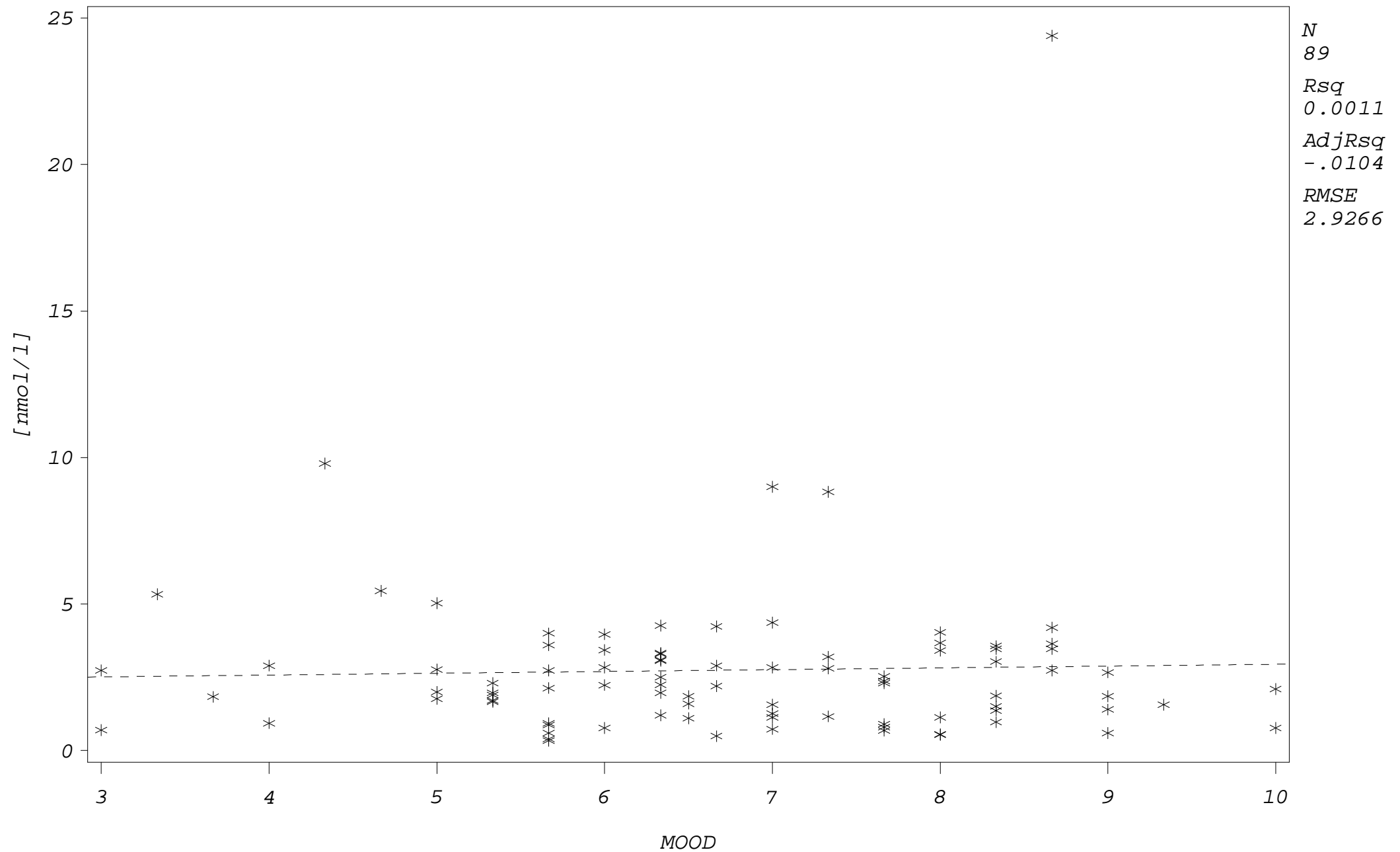
Study 2: cortisol levels * mood (by occupational group)

occupational group=4.00 sampling occasion=3



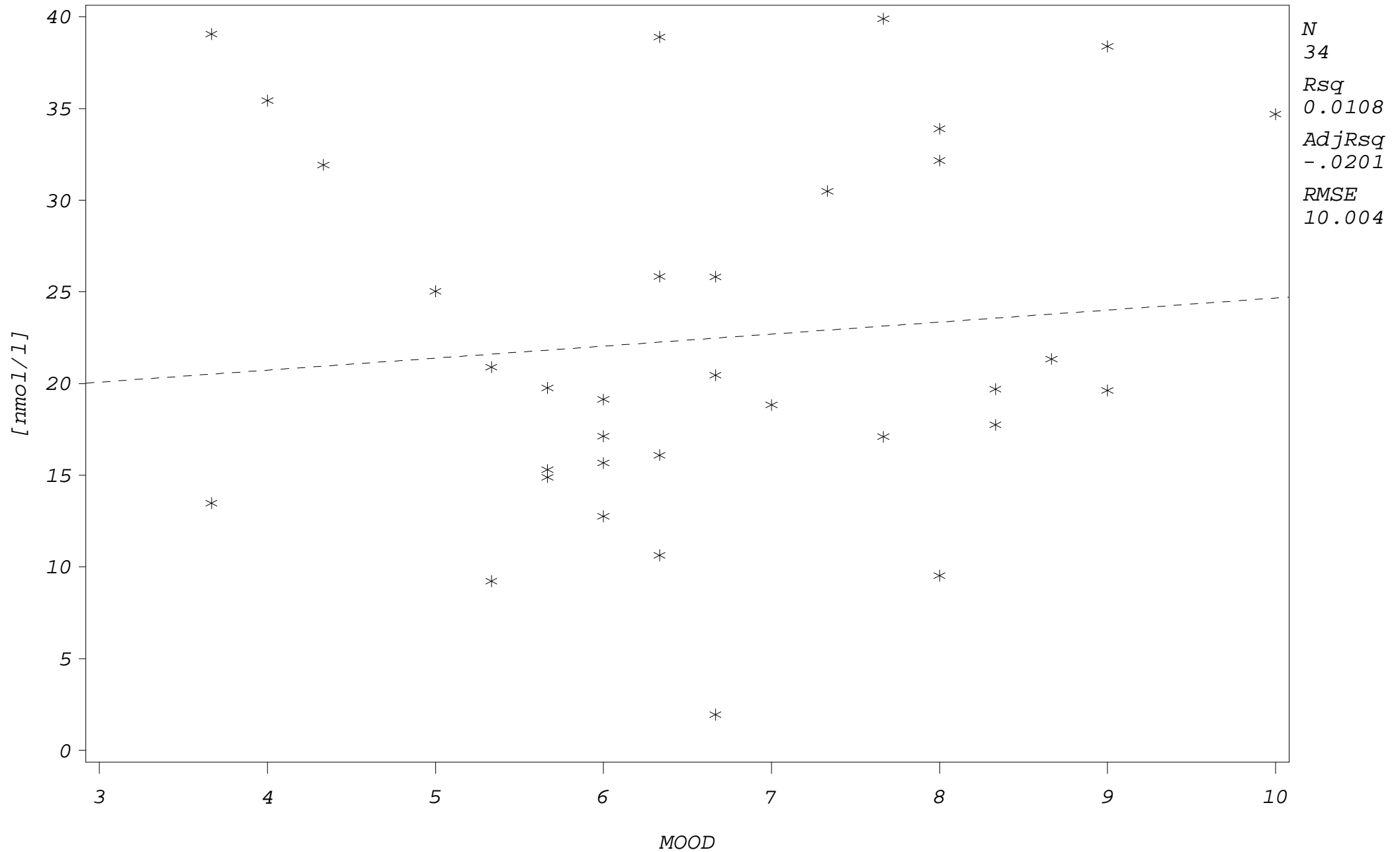
Study 2: cortisol levels * mood (by occupational group)

occupational group=4.00 sampling occasion=4



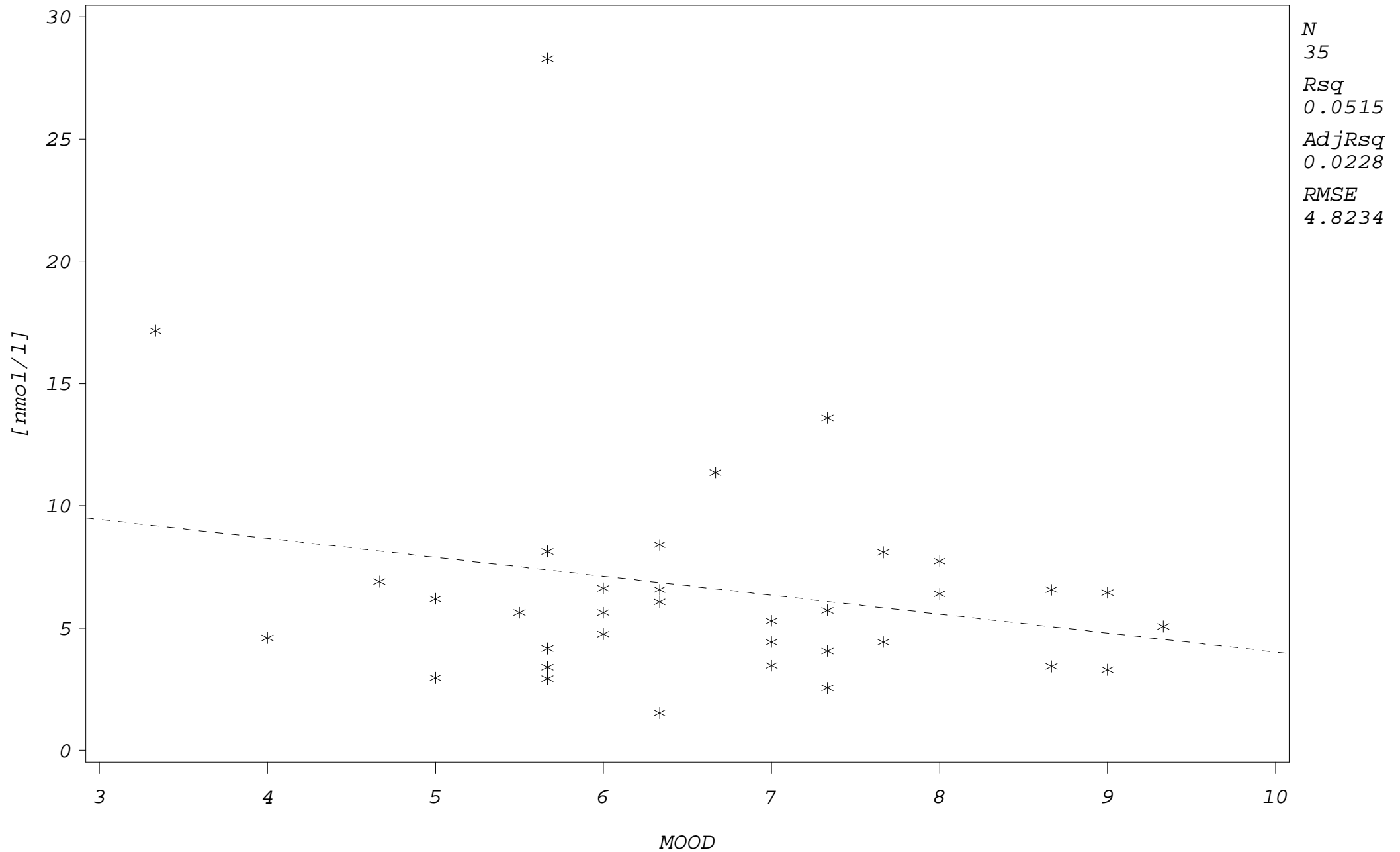
Study 2: cortisol levels * mood (by occupational group)

occupational group=5.00 sampling occasion=2



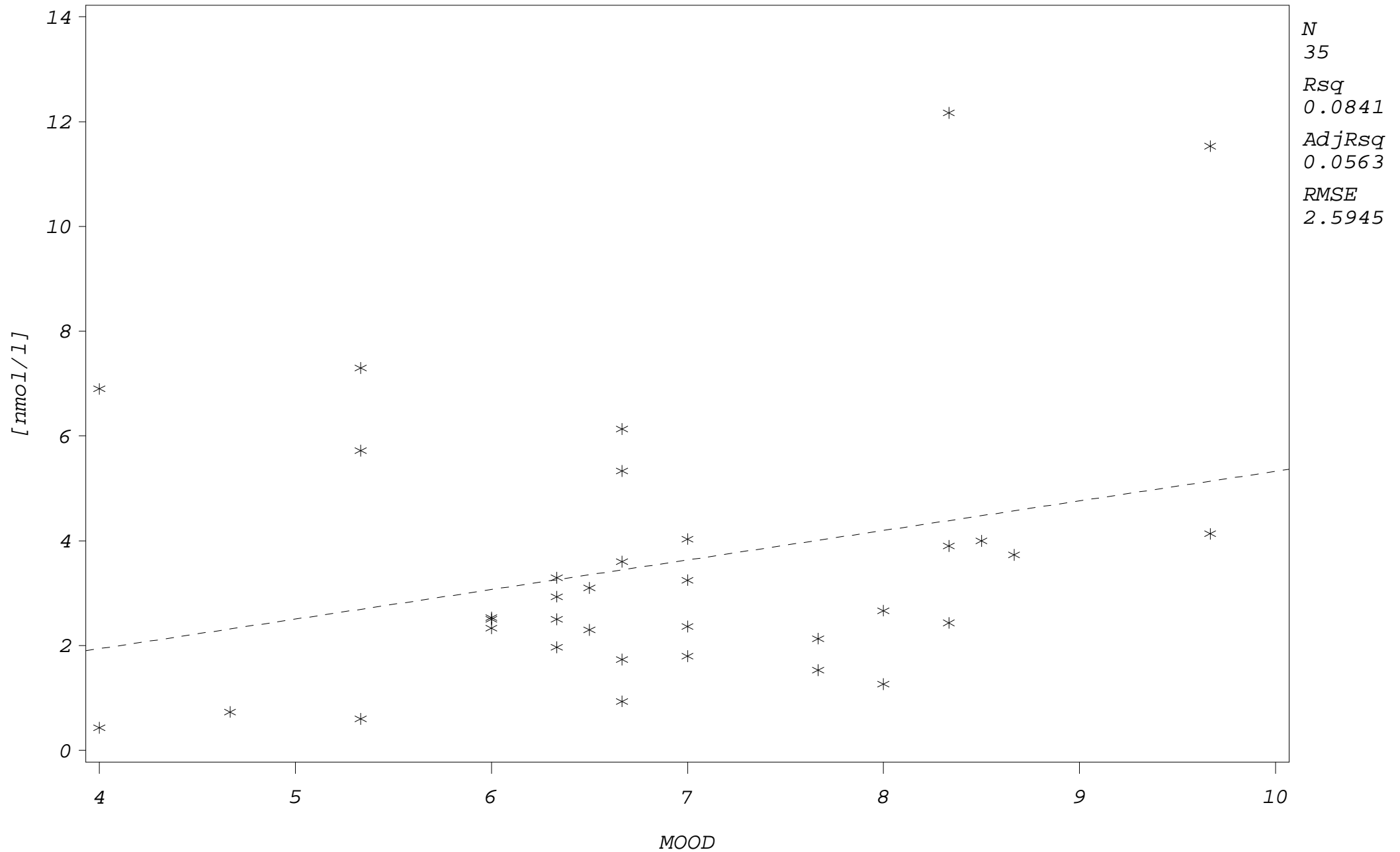
Study 2: cortisol levels * mood (by occupational group)

occupational group=5.00 sampling occasion=3



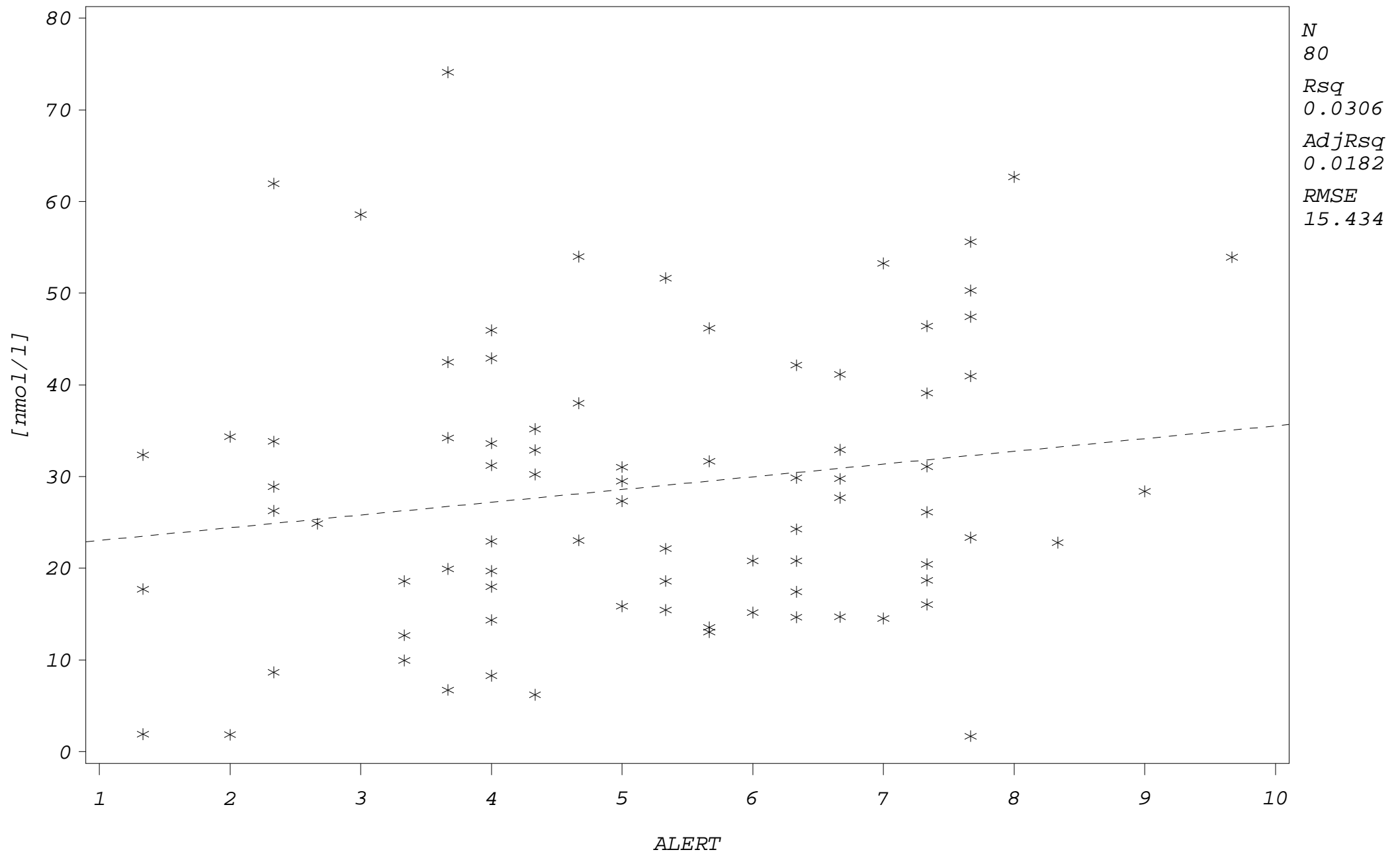
Study 2: cortisol levels * mood (by occupational group)

occupational group=5.00 sampling occasion=4



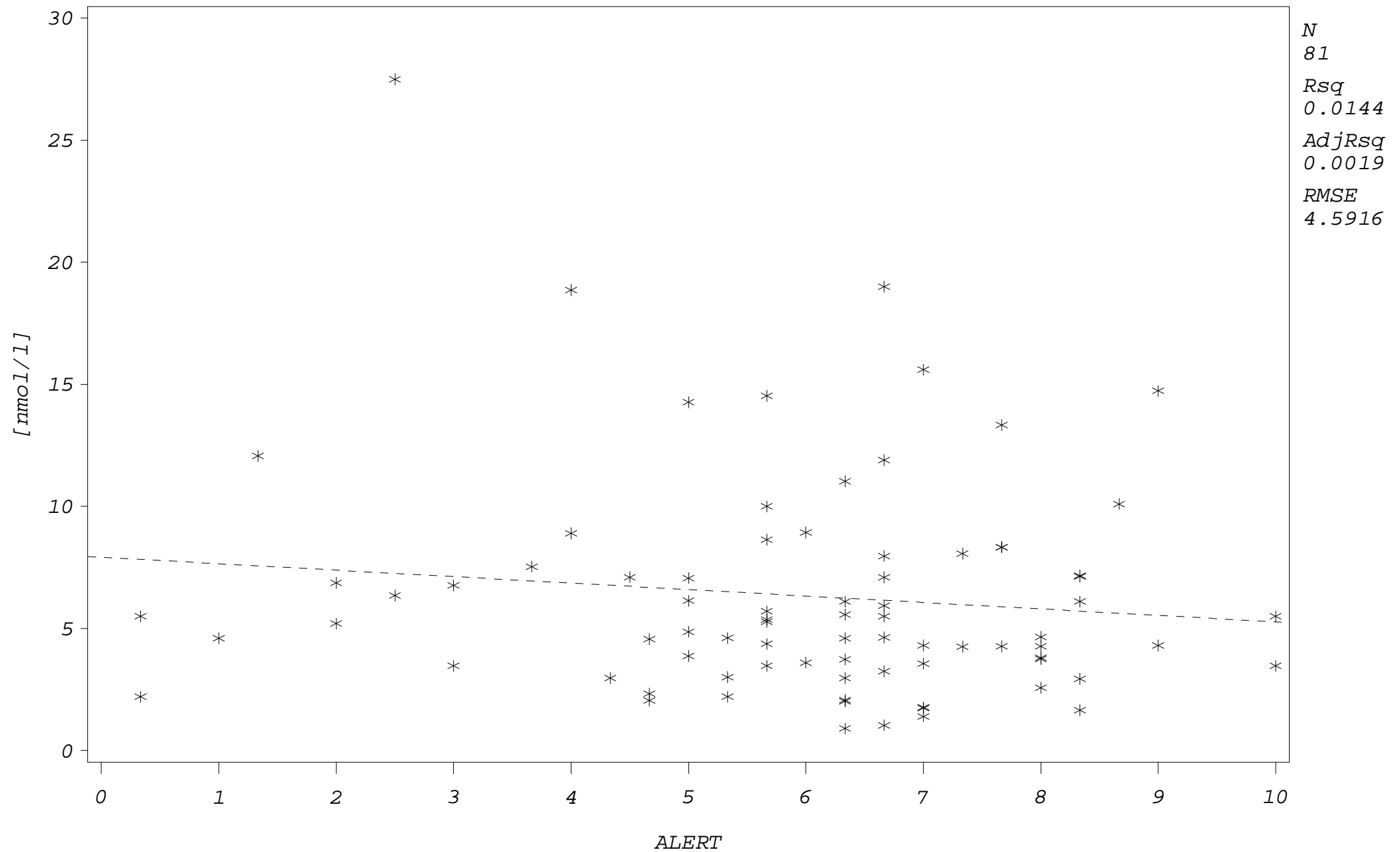
Study 2: cortisol levels * alertness (by occupational group)

occupational group=1.00 sampling occasion=2



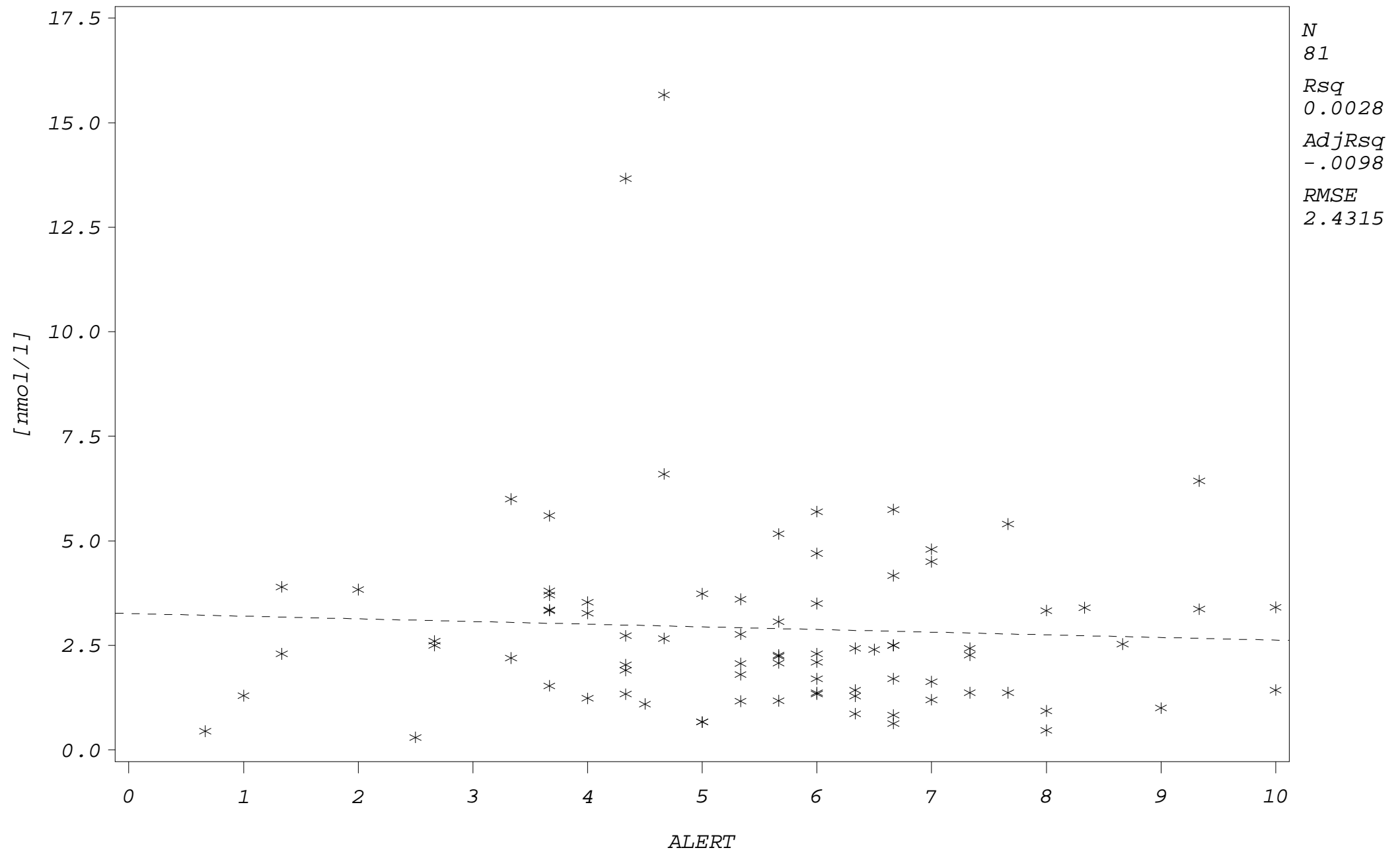
Study 2: cortisol levels * alertness (by occupational group)

occupational group=1.00 sampling occasion=3



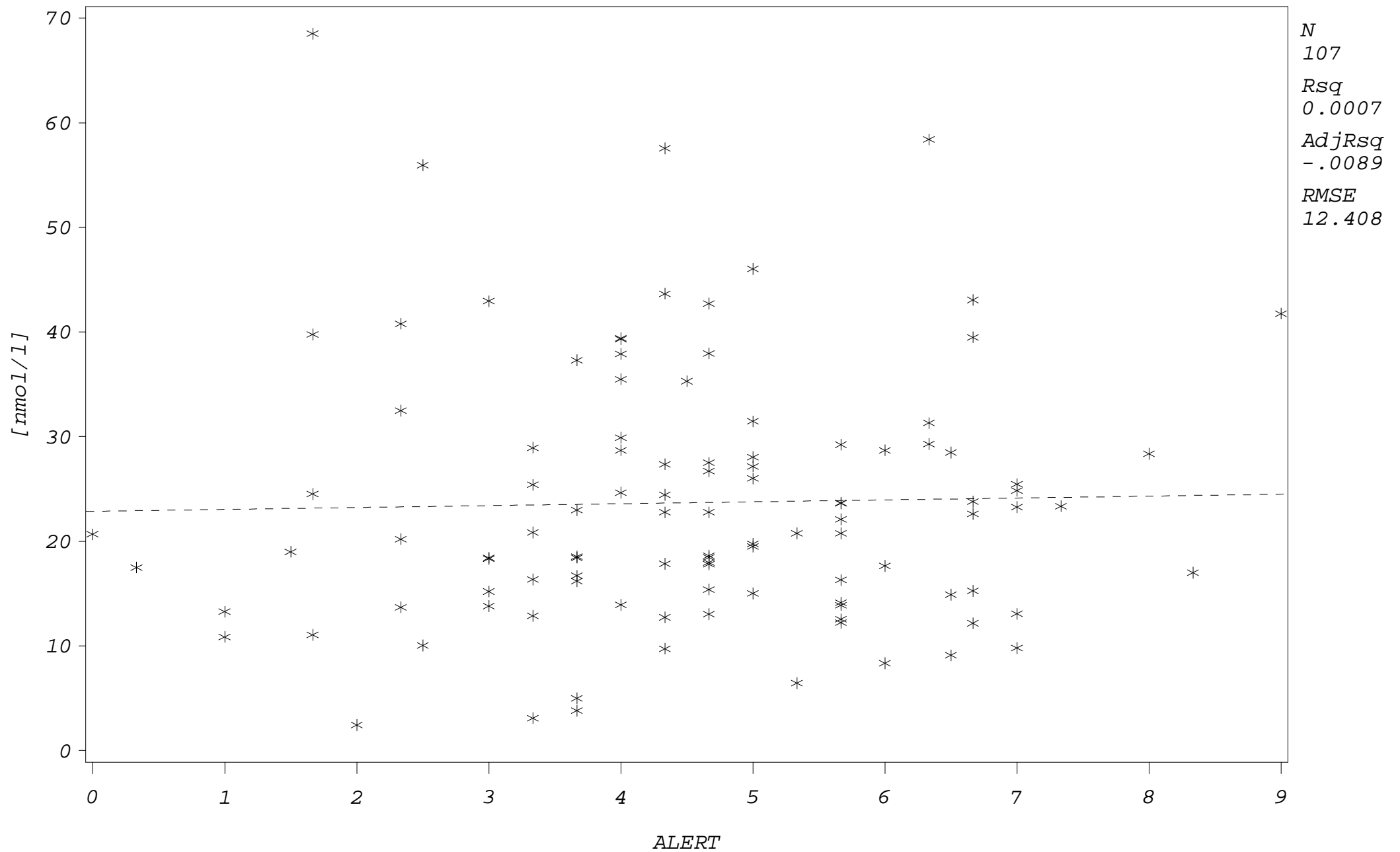
Study 2: cortisol levels * alertness (by occupational group)

occupational group=1.00 sampling occasion=4



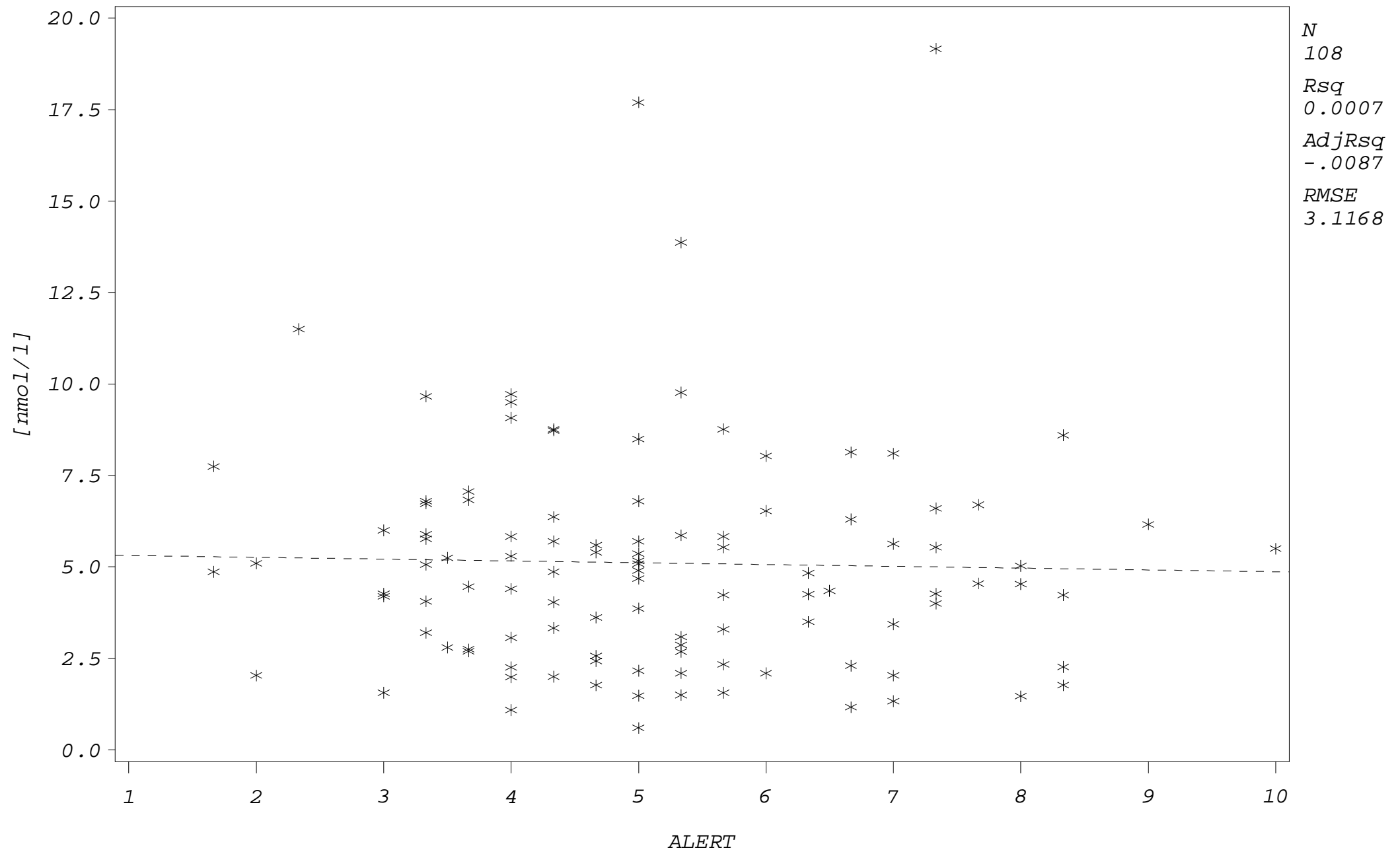
Study 2: cortisol levels * alertness (by occupational group)

occupational group=2.00 sampling occasion=2



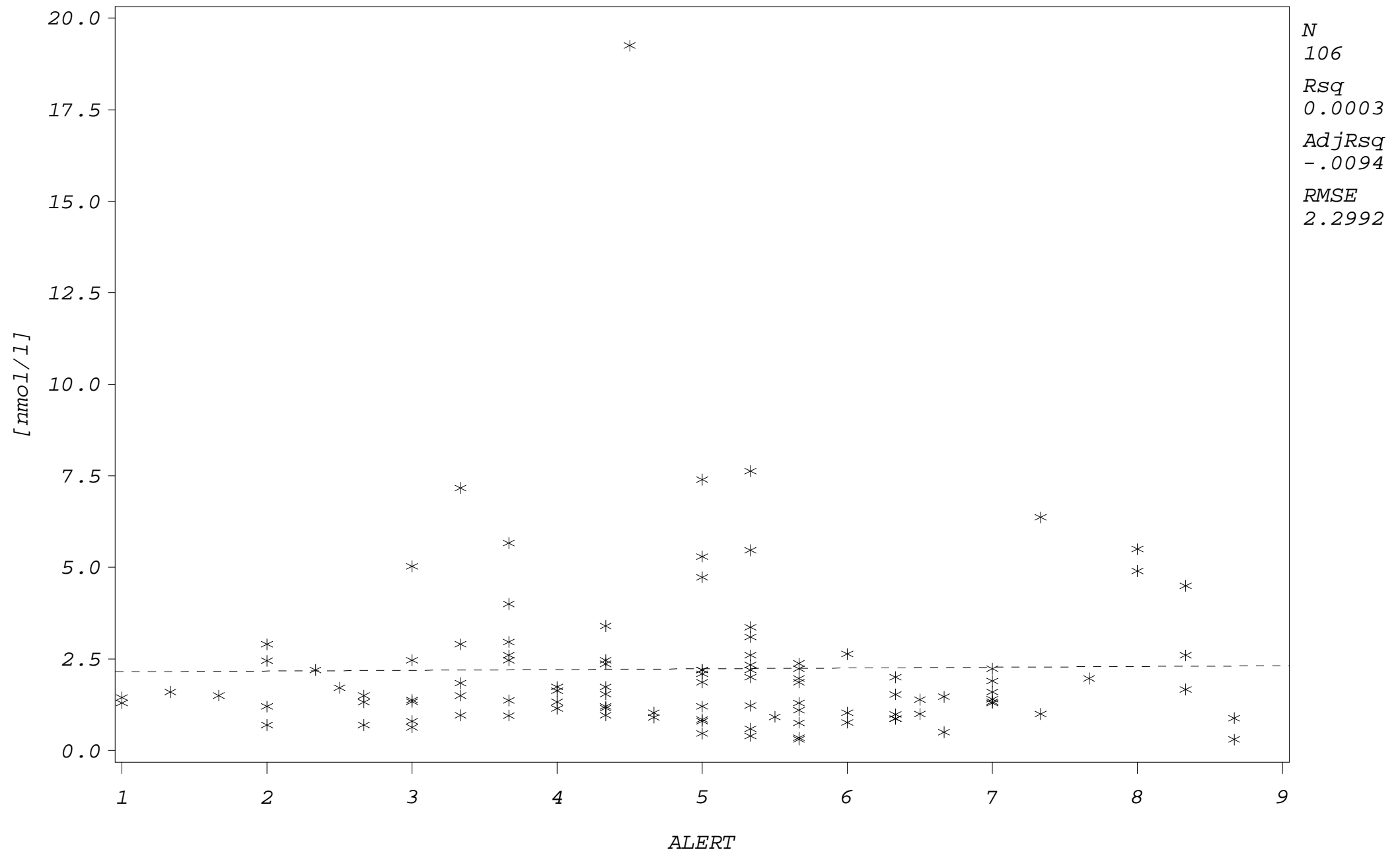
Study 2: cortisol levels * alertness (by occupational group)

occupational group=2.00 sampling occasion=3



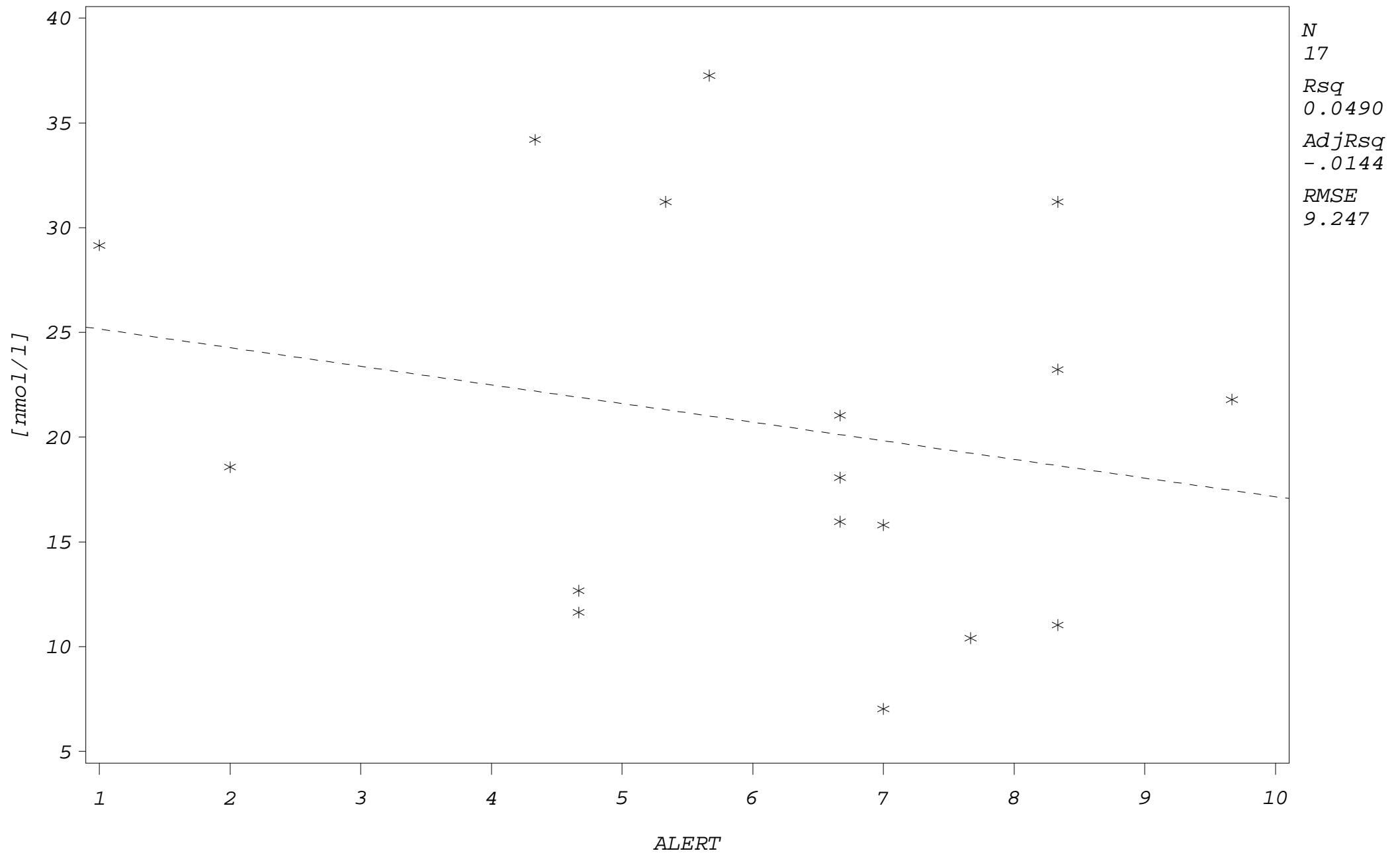
Study 2: cortisol levels * alertness (by occupational group)

occupational group=2.00 sampling occasion=4



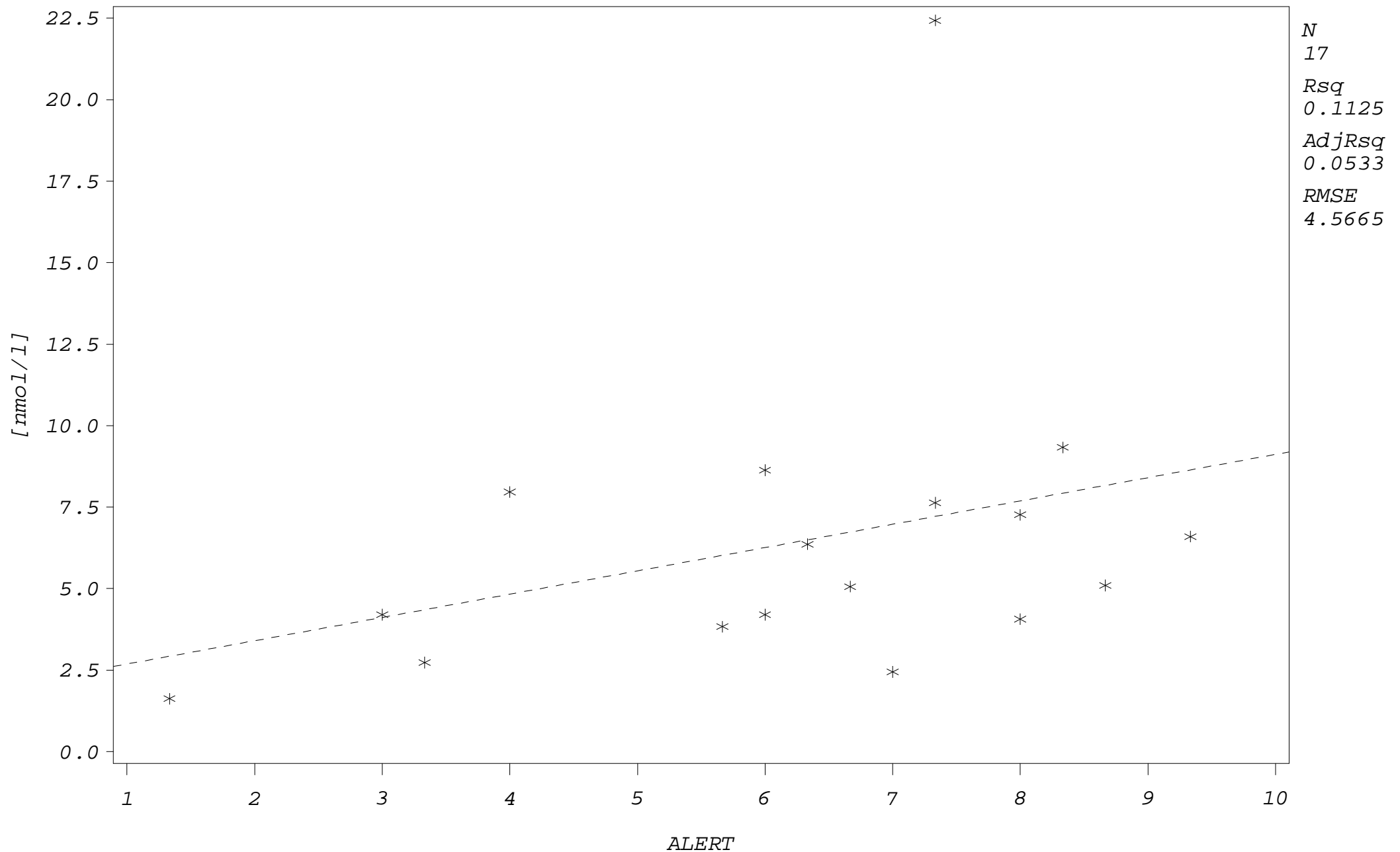
Study 2: cortisol levels * alertness (by occupational group)

occupational group=3.00 sampling occasion=2



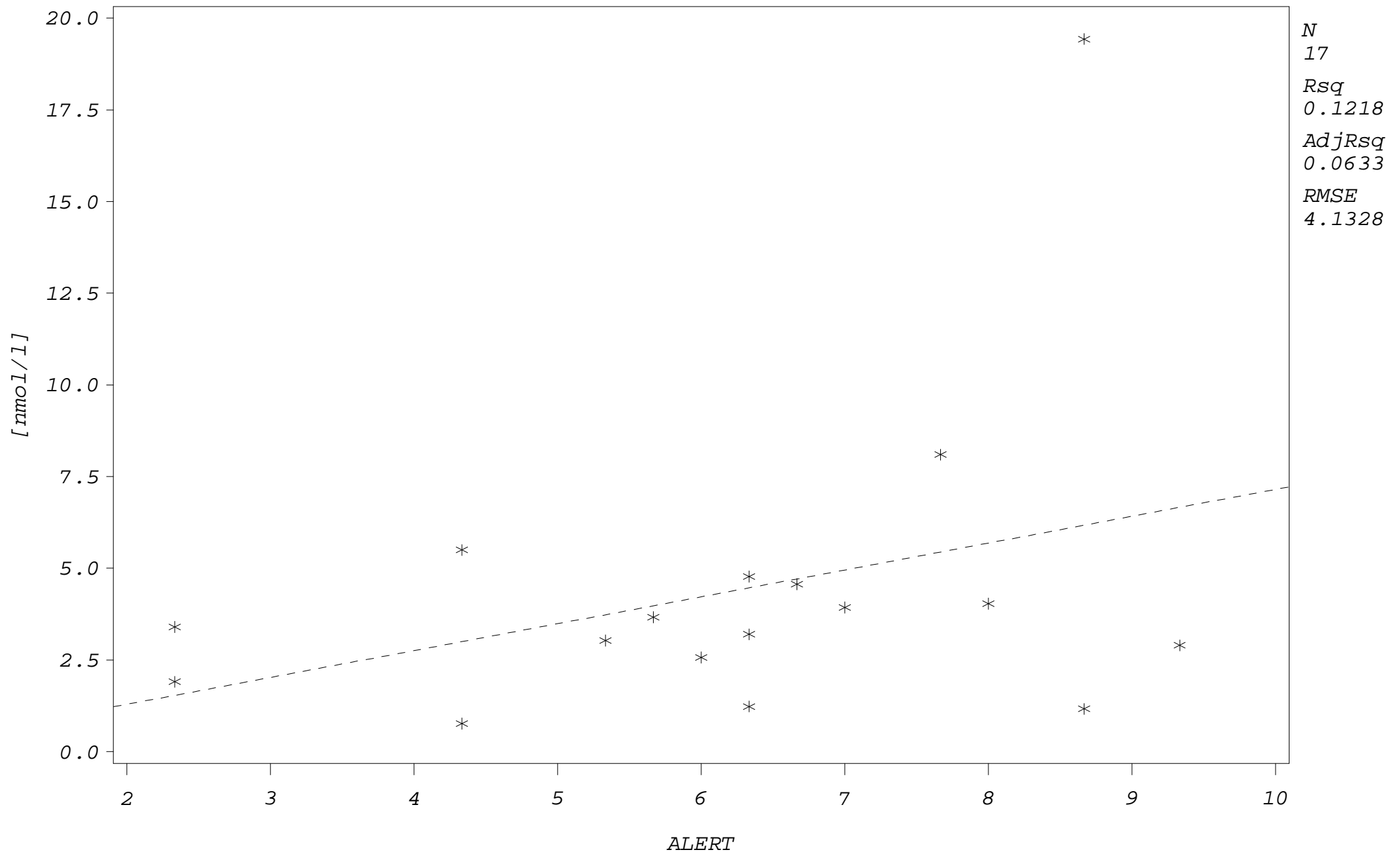
Study 2: cortisol levels * alertness (by occupational group)

occupational group=3.00 sampling occasion=3



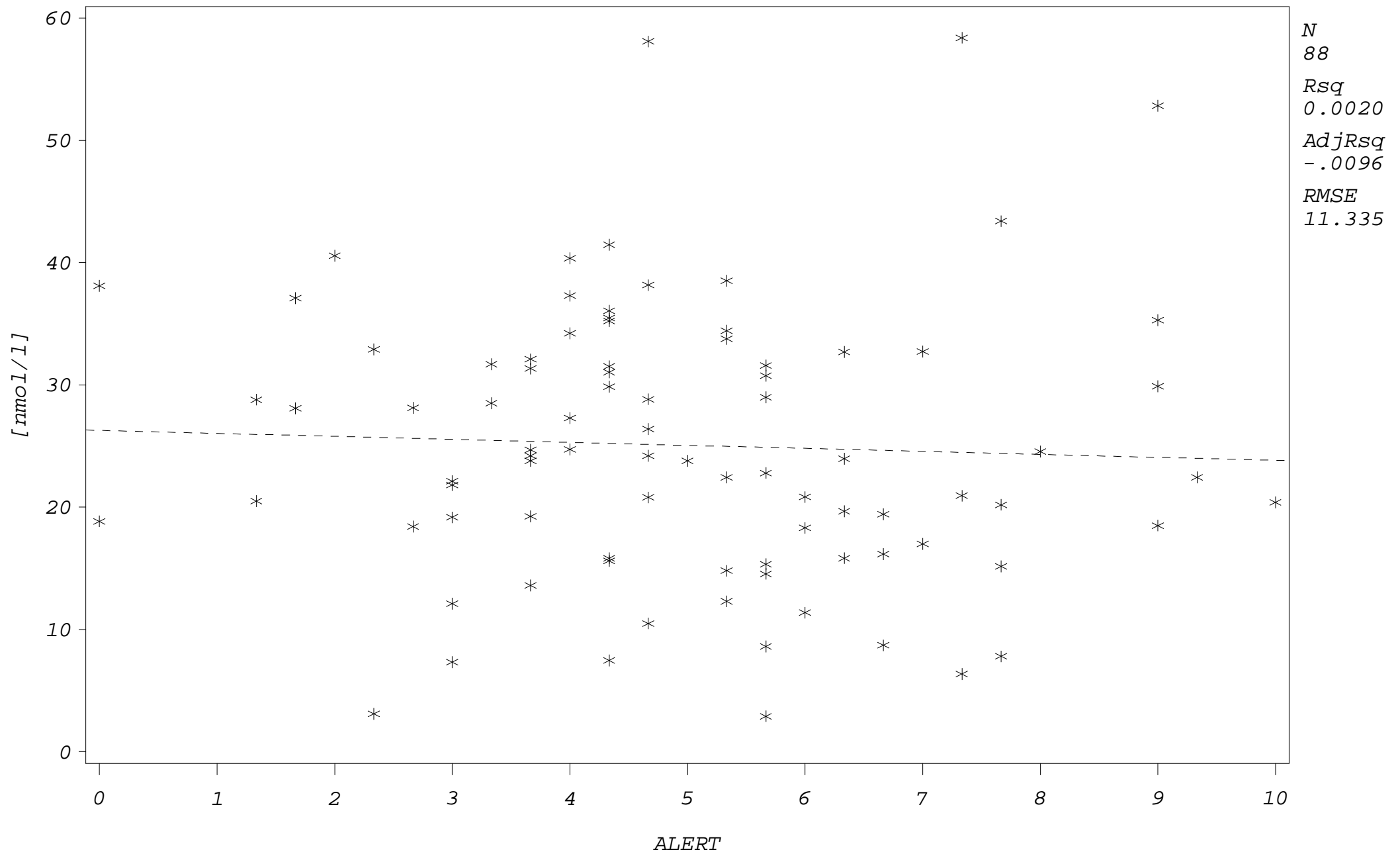
Study 2: cortisol levels * alertness (by occupational group)

occupational group=3.00 sampling occasion=4



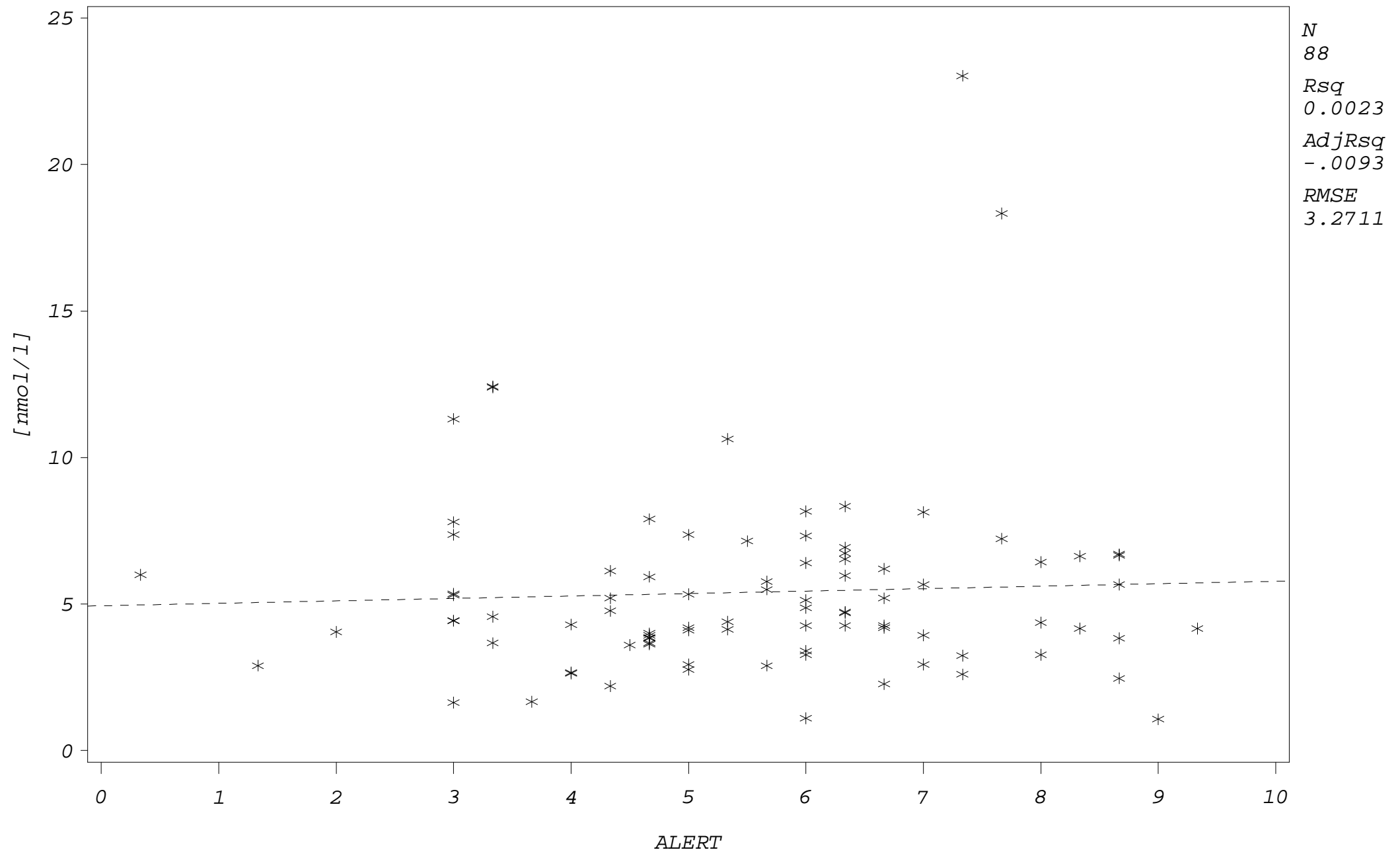
Study 2: cortisol levels * alertness (by occupational group)

occupational group=4.00 sampling occasion=2



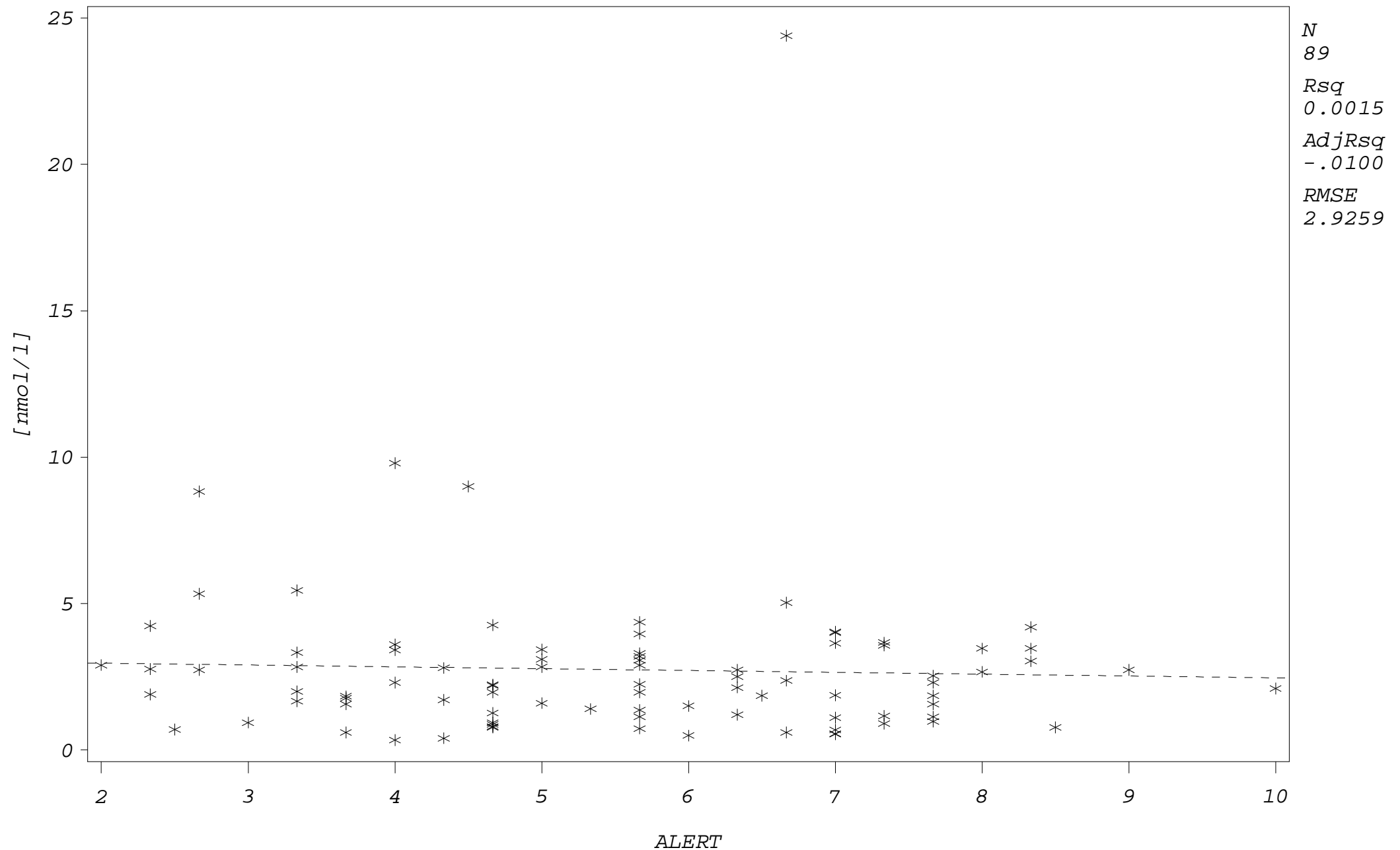
Study 2: cortisol levels * alertness (by occupational group)

occupational group=4.00 sampling occasion=3



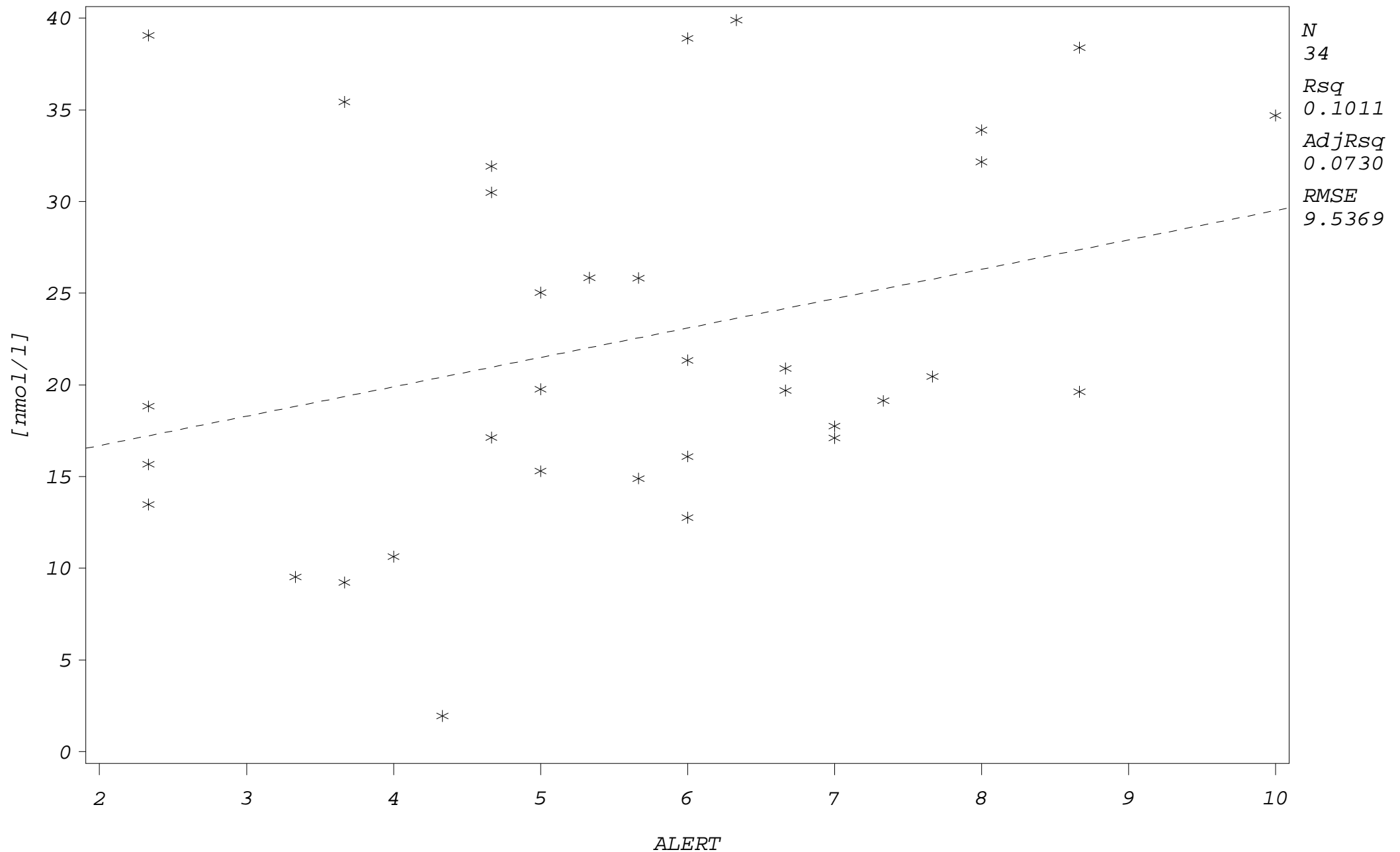
Study 2: cortisol levels * alertness (by occupational group)

occupational group=4.00 sampling occasion=4



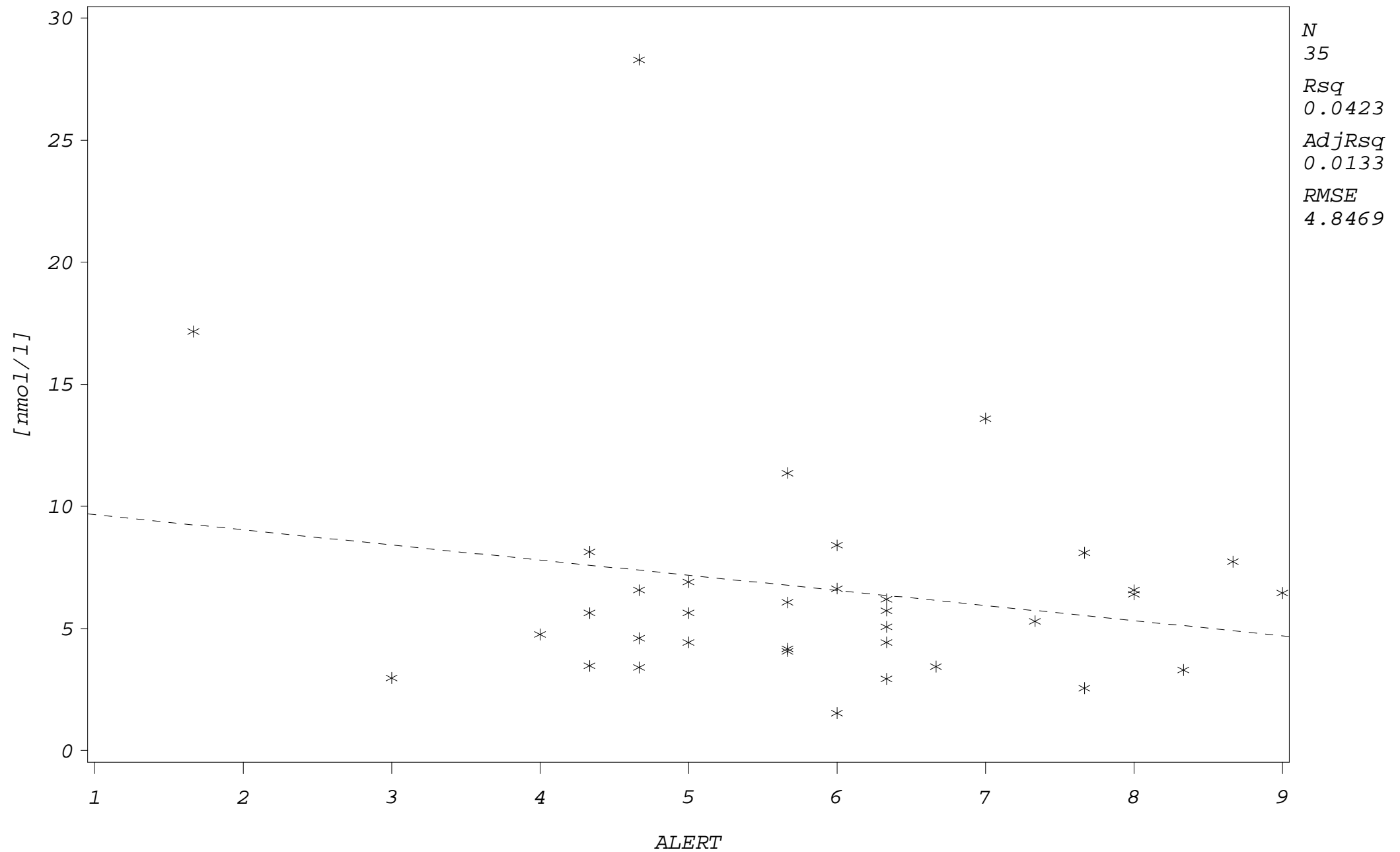
Study 2: cortisol levels * alertness (by occupational group)

occupational group=5.00 sampling occasion=2



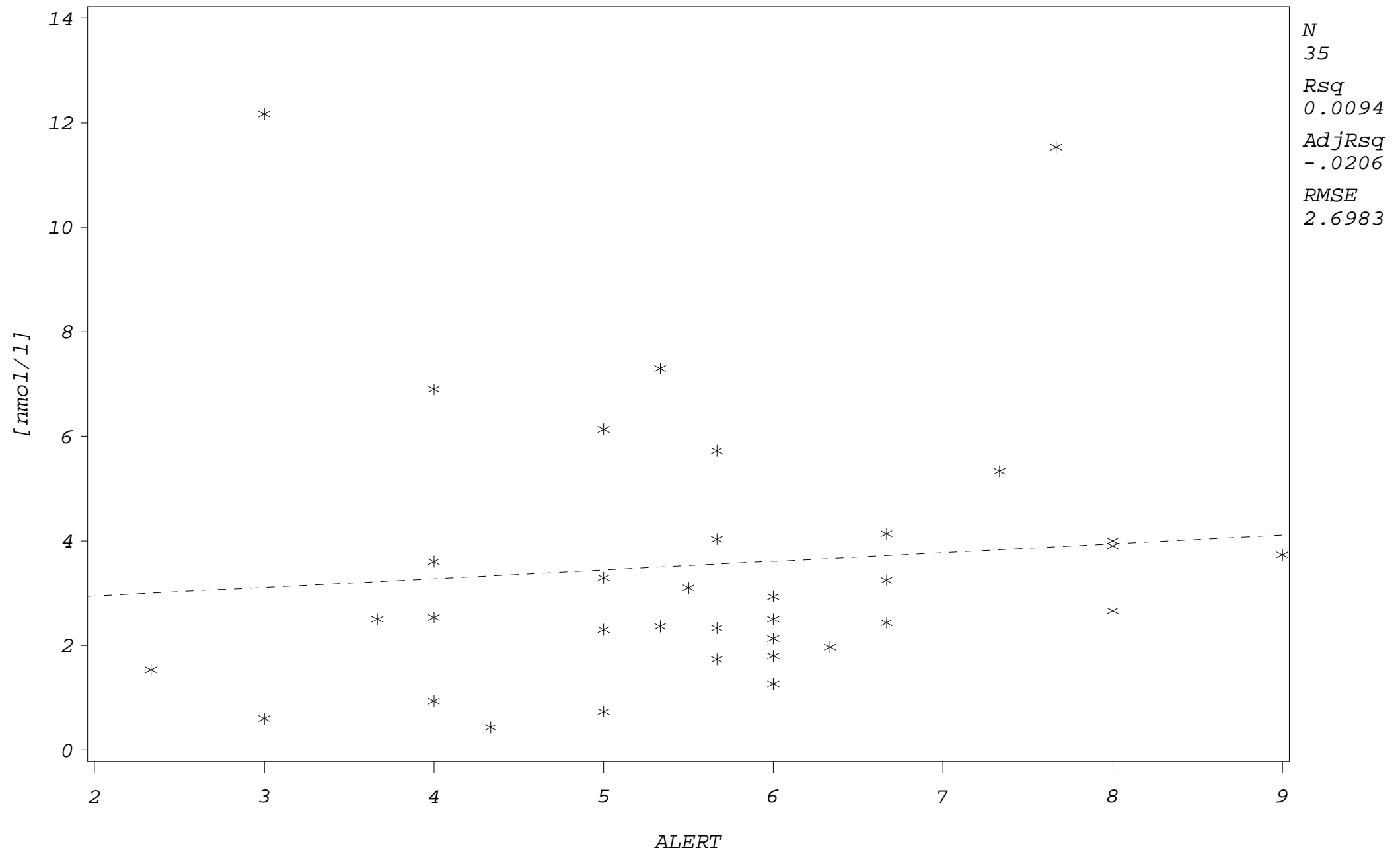
Study 2: cortisol levels * alertness (by occupational group)

occupational group=5.00 sampling occasion=3



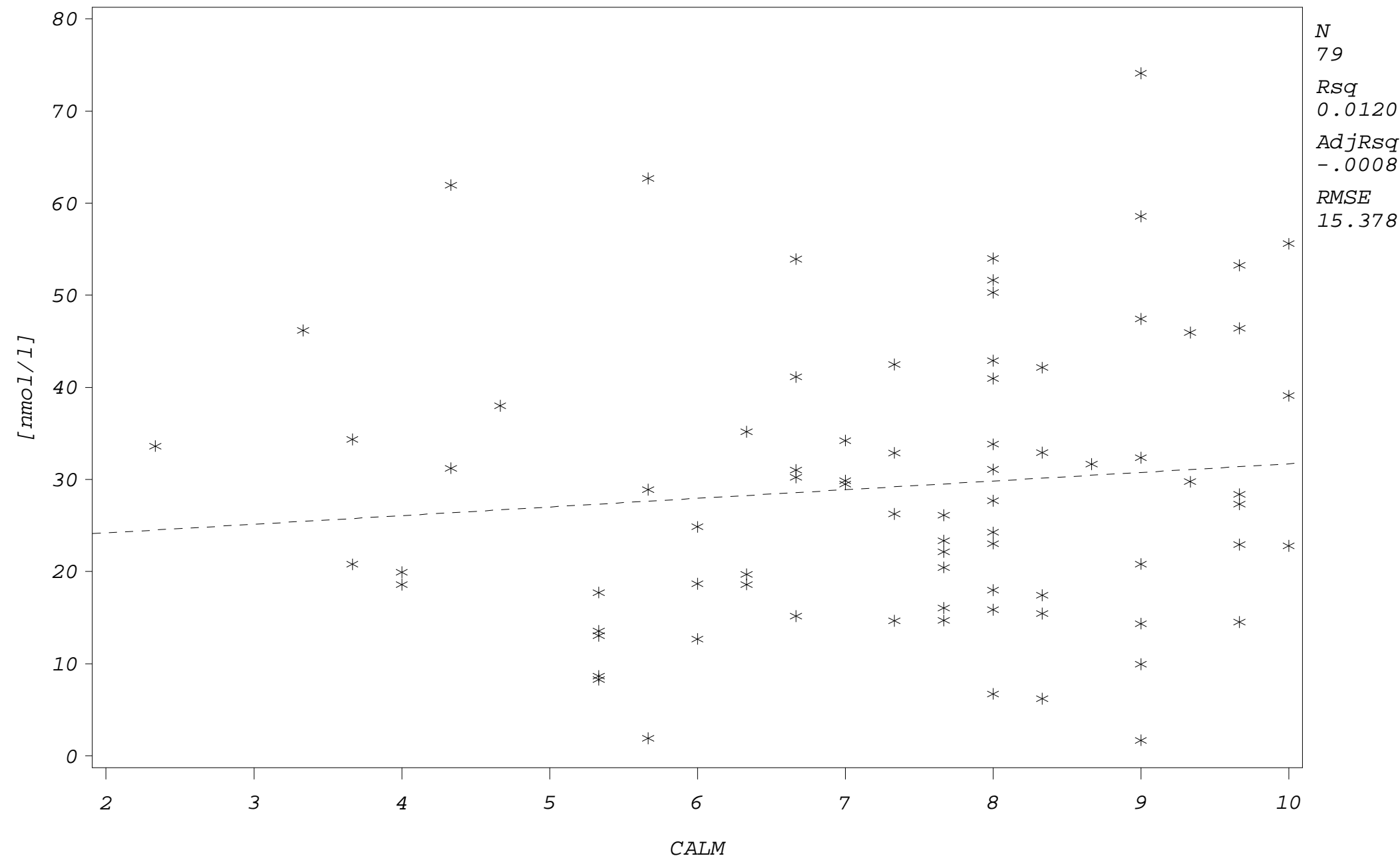
Study 2: cortisol levels * alertness (by occupational group)

occupational group=5.00 sampling occasion=4



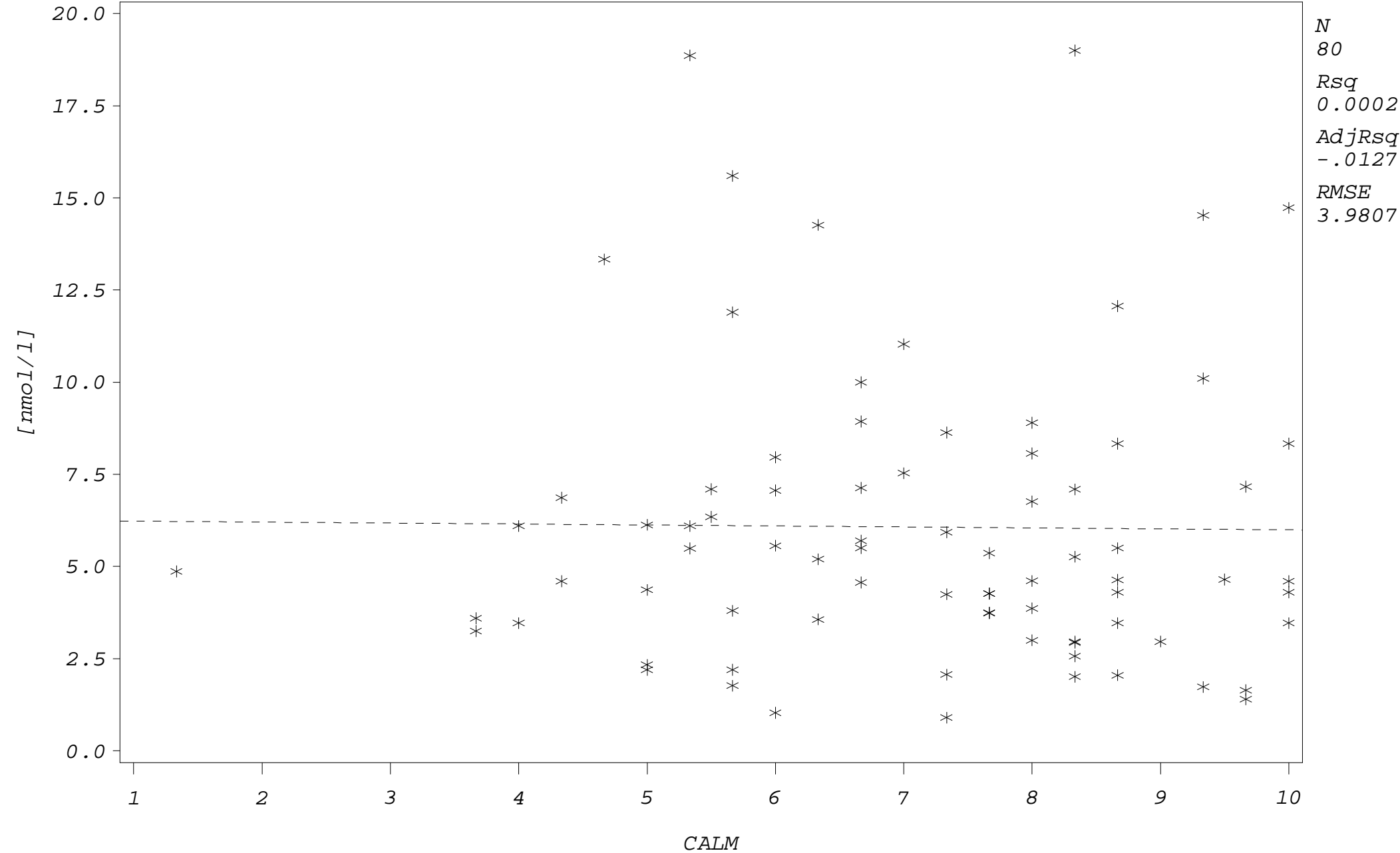
Study 2: cortisol levels * calmness (by occupational group)

occupational group=1.00 sampling occasion=2



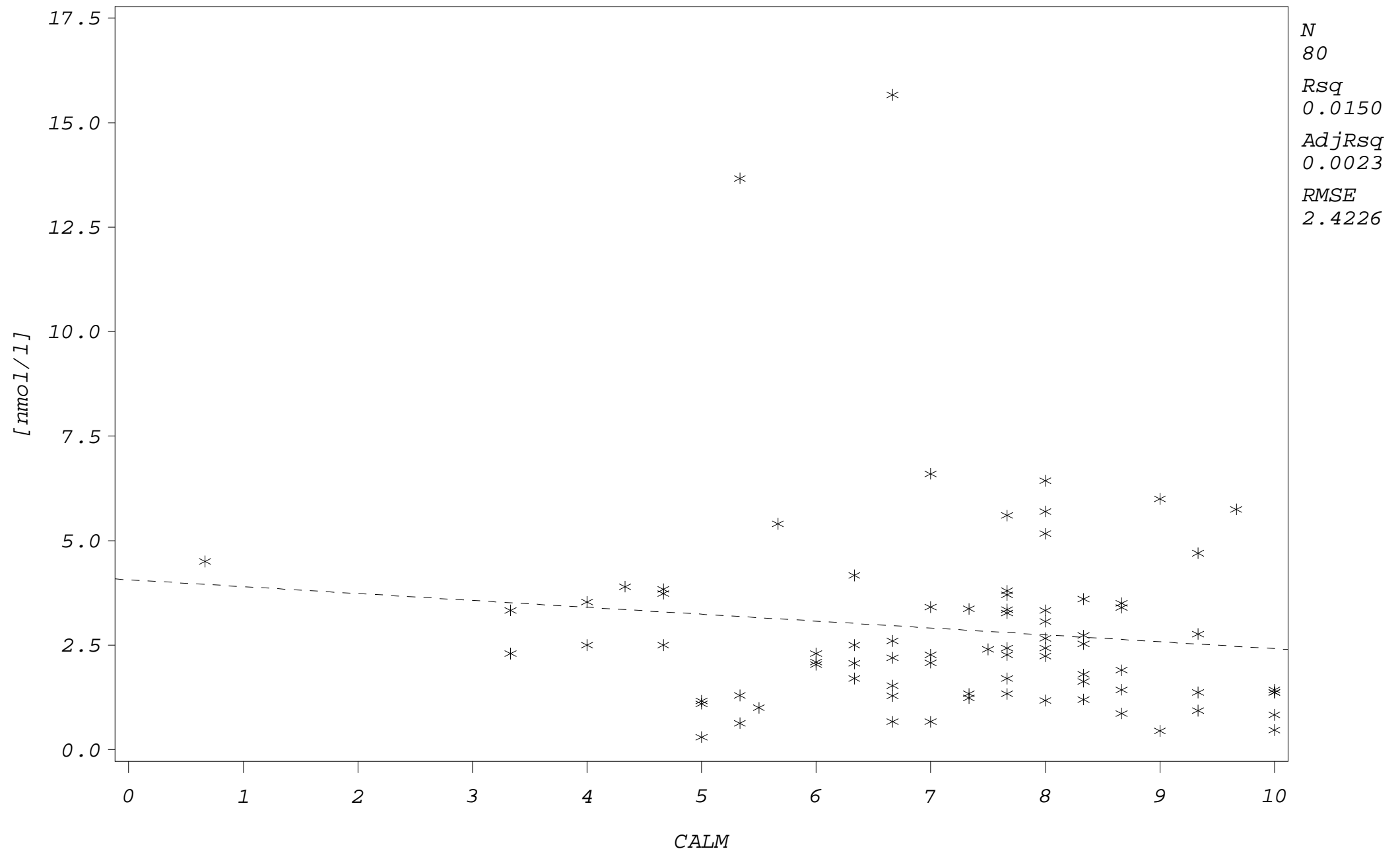
Study 2: cortisol levels * calmness (by occupational group)

occupational group=1.00 sampling occasion=3



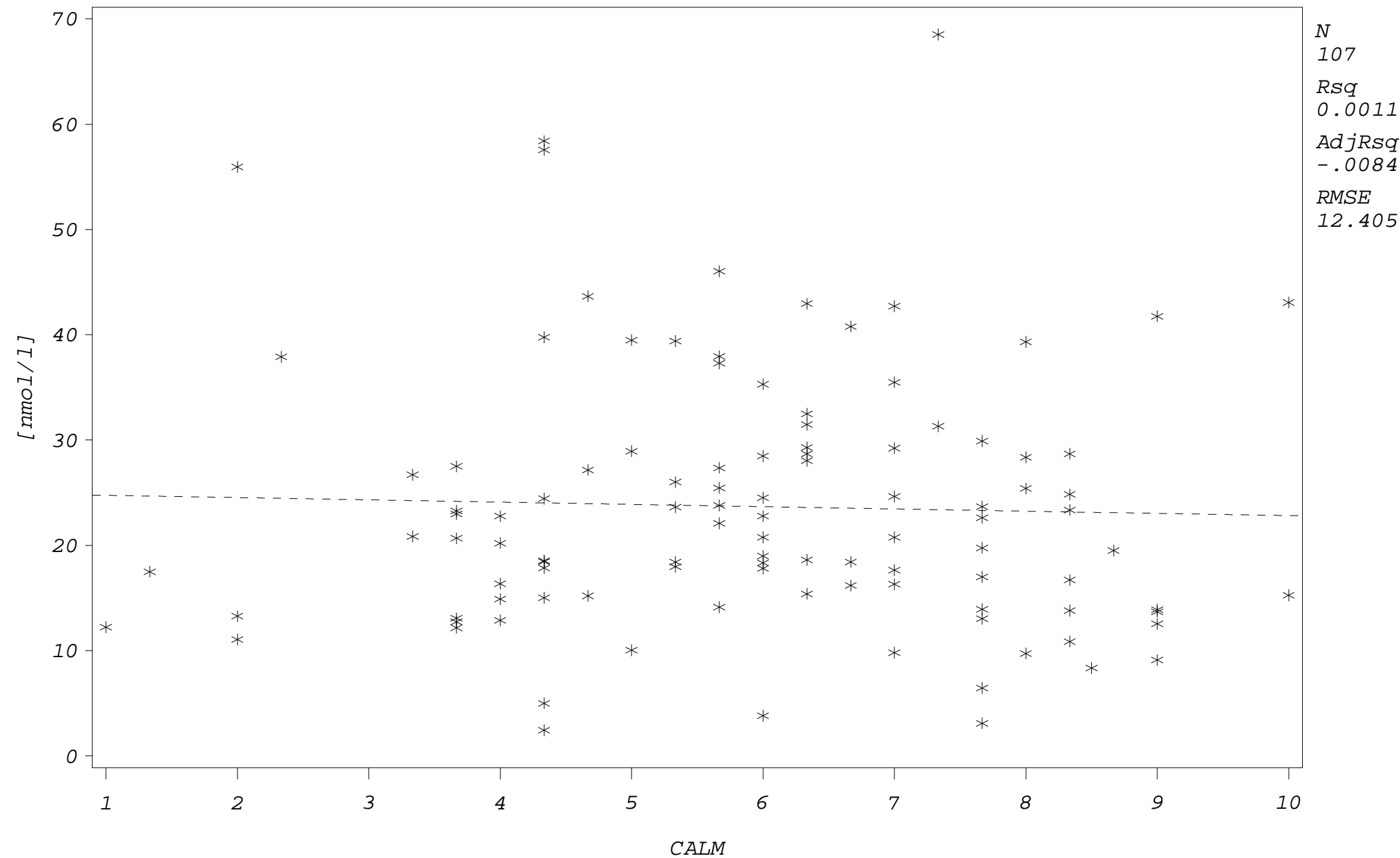
Study 2: cortisol levels * calmness (by occupational group)

occupational group=1.00 sampling occasion=4



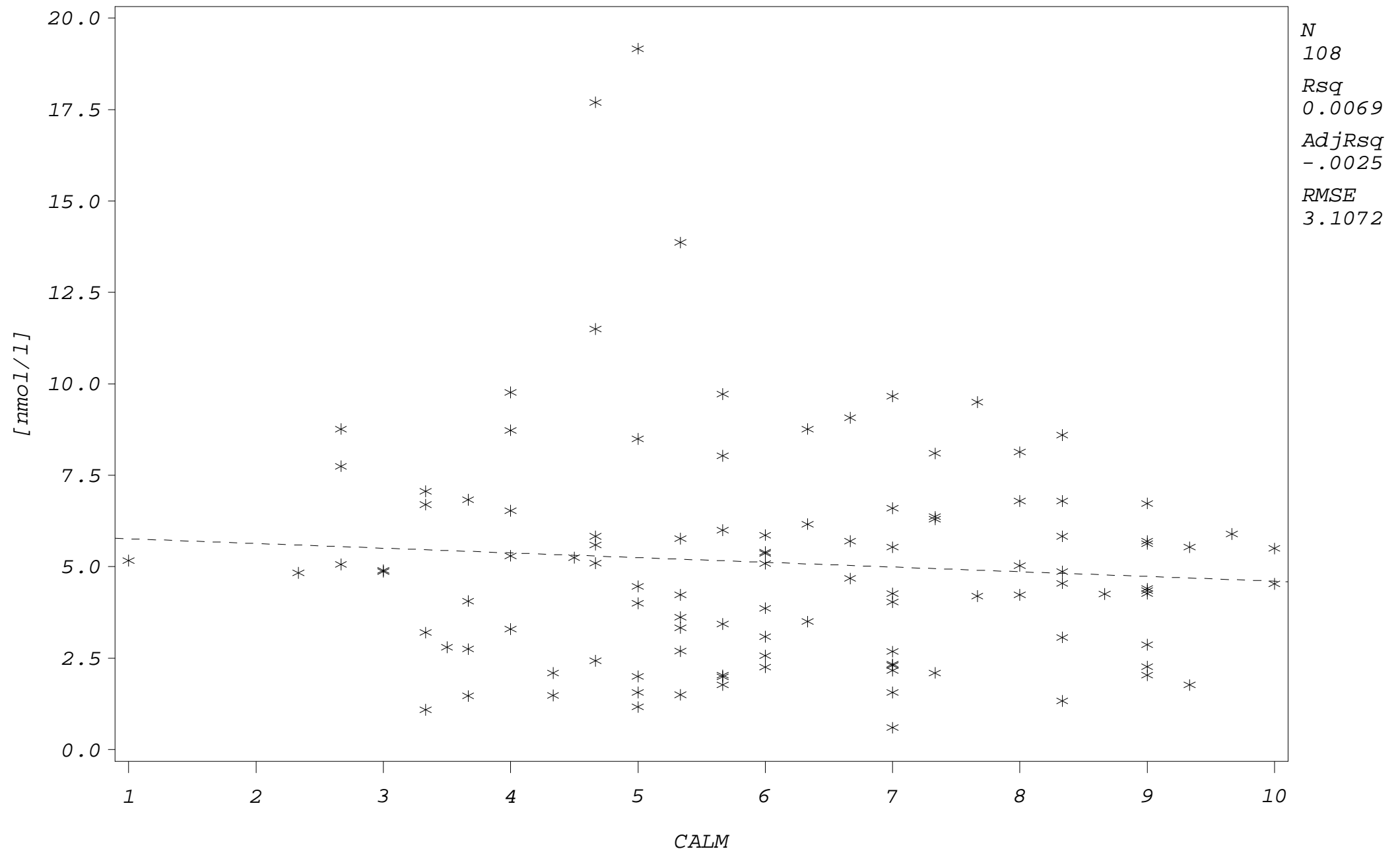
Study 2: cortisol levels * calmness (by occupational group)

occupational group=2.00 sampling occasion=2



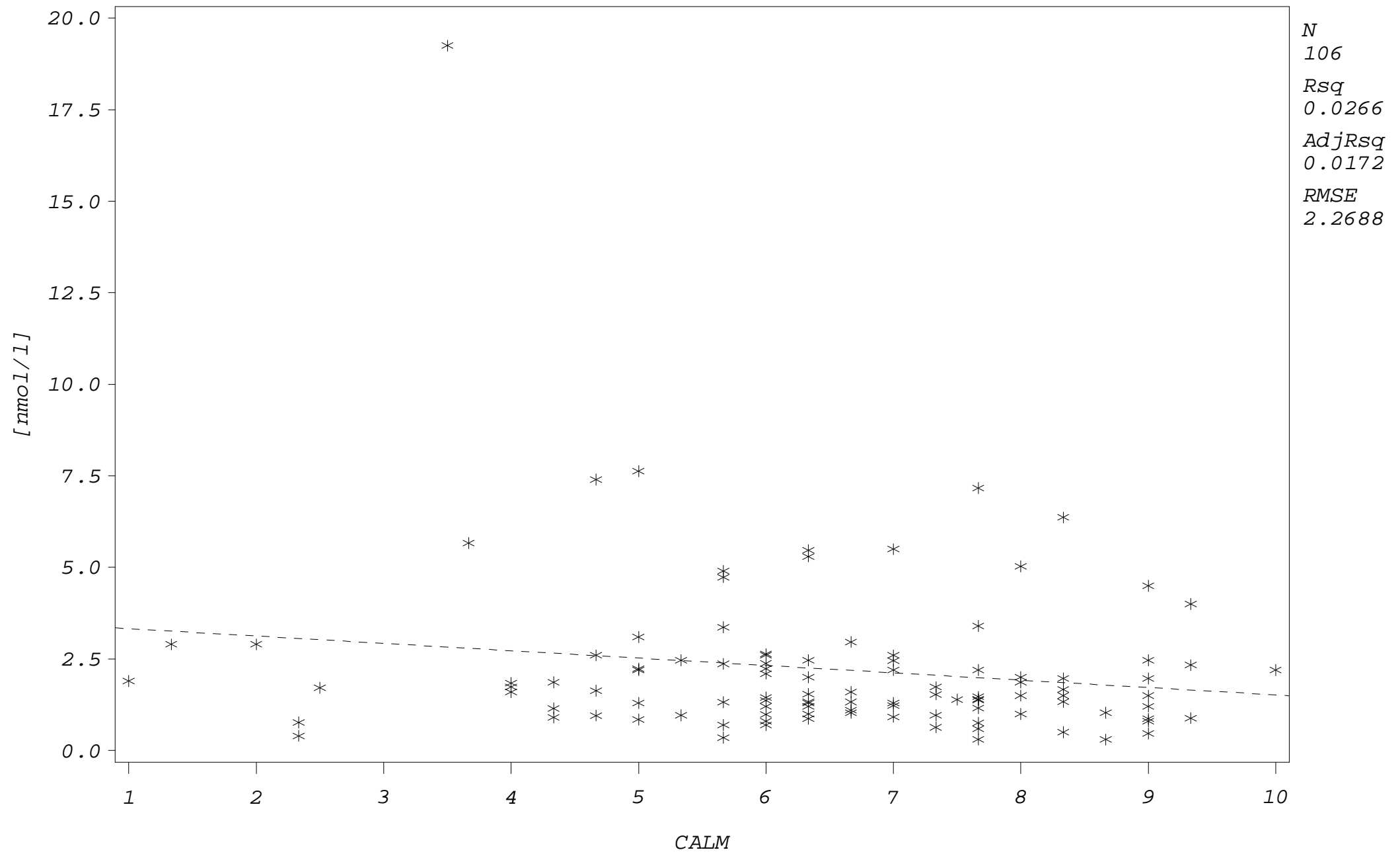
Study 2: cortisol levels * calmness (by occupational group)

occupational group=2.00 sampling occasion=3



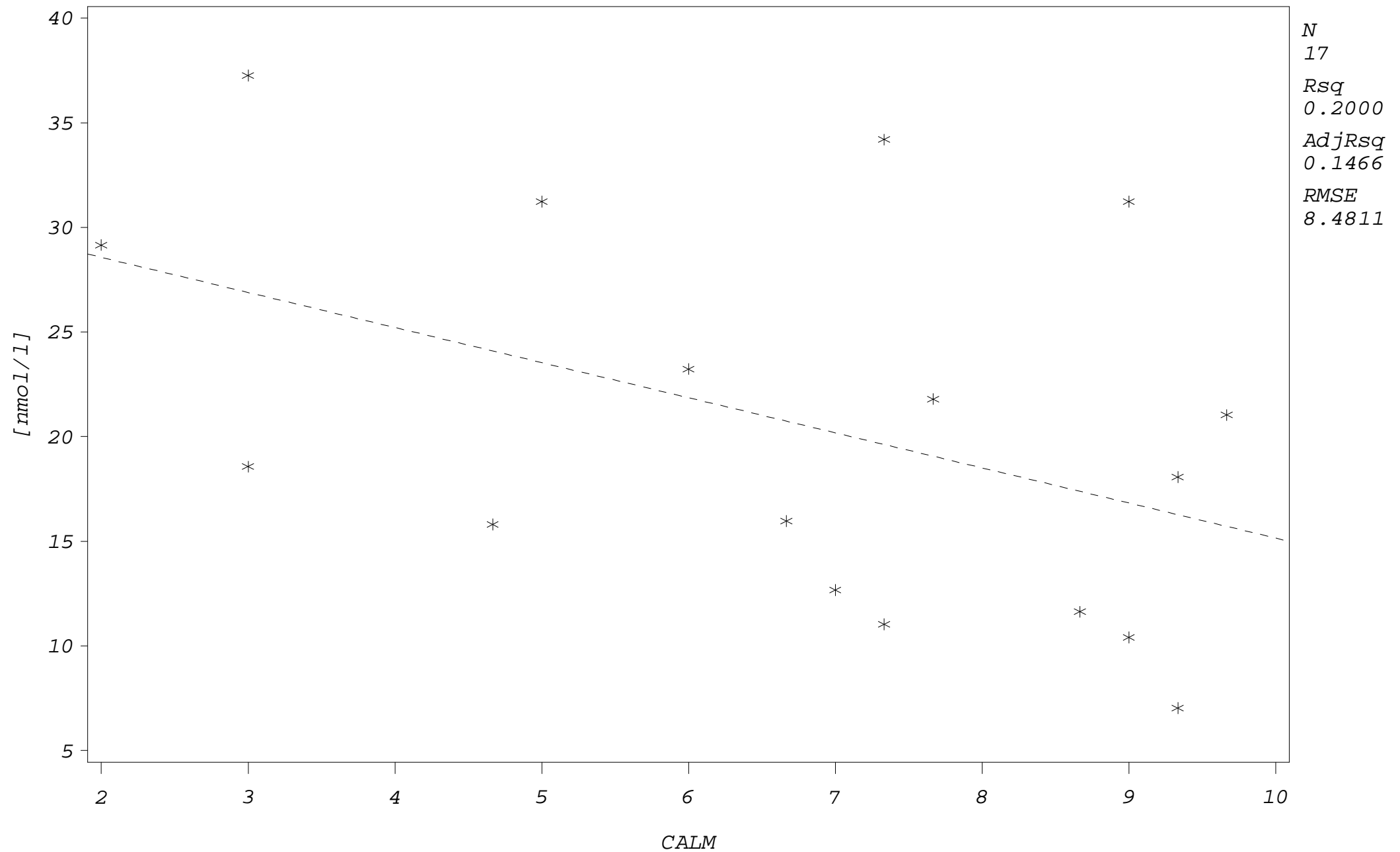
Study 2: cortisol levels * calmness (by occupational group)

occupational group=2.00 sampling occasion=4



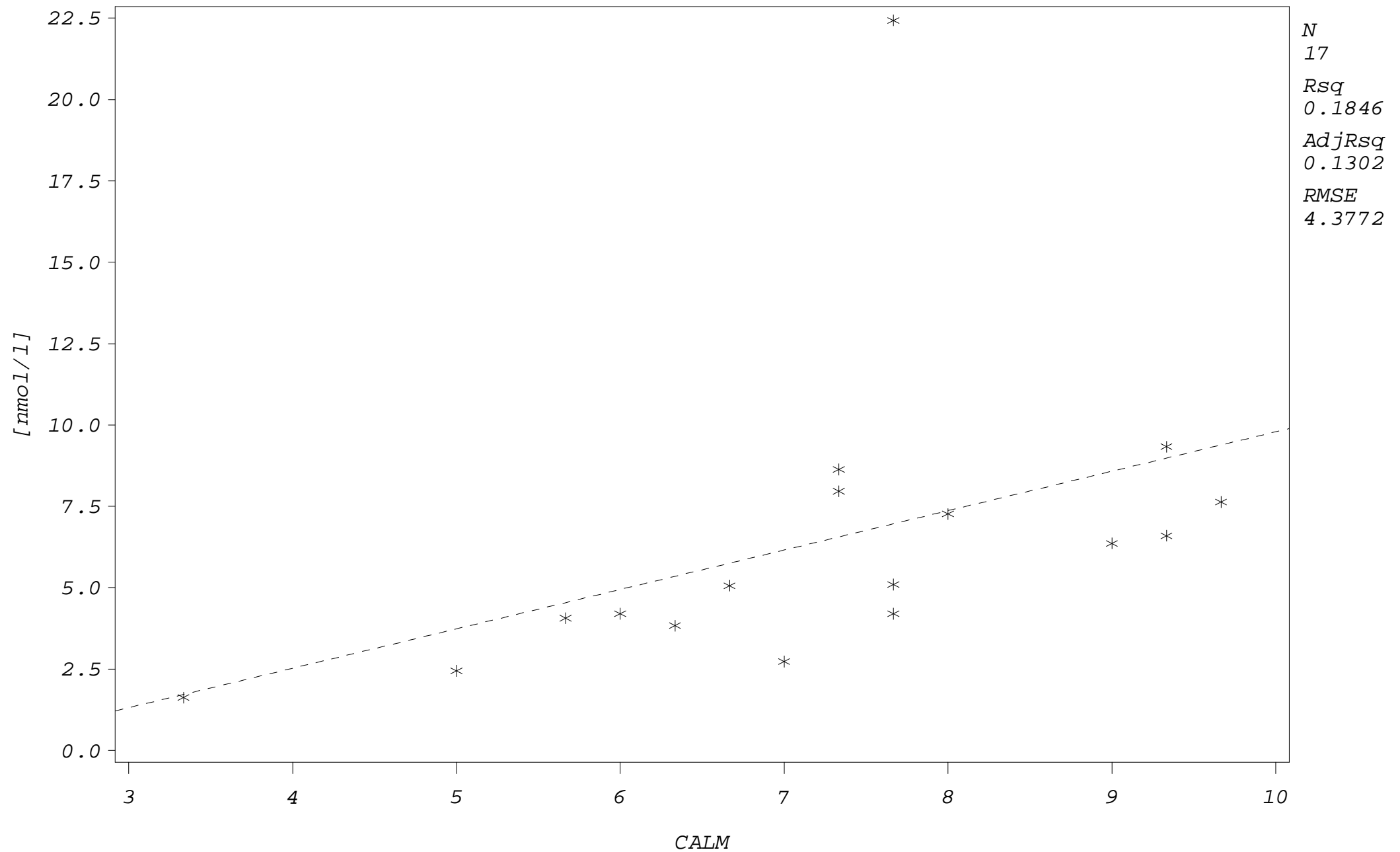
Study 2: cortisol levels * calmness (by occupational group)

occupational group=3.00 sampling occasion=2



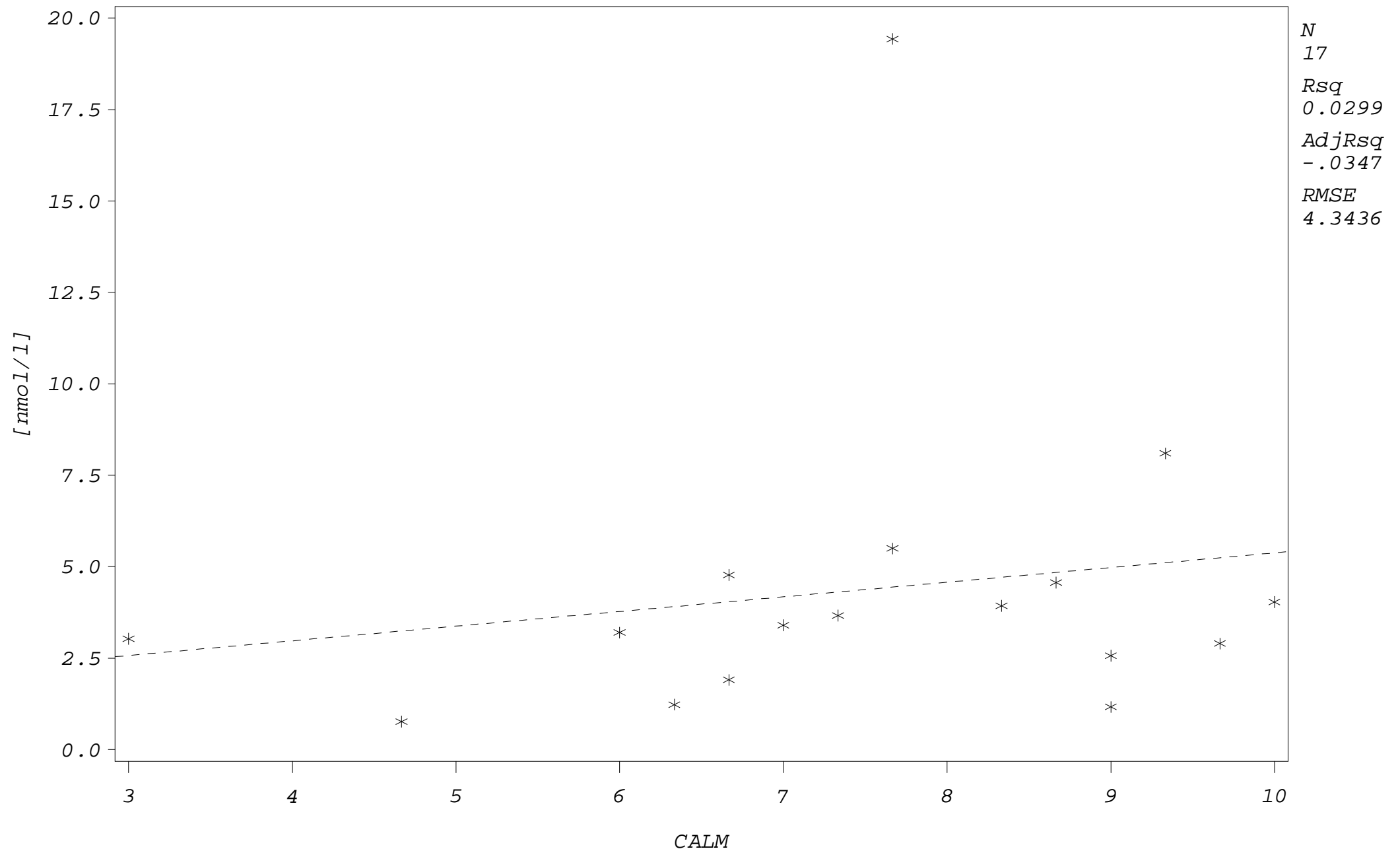
Study 2: cortisol levels * calmness (by occupational group)

occupational group=3.00 sampling occasion=3



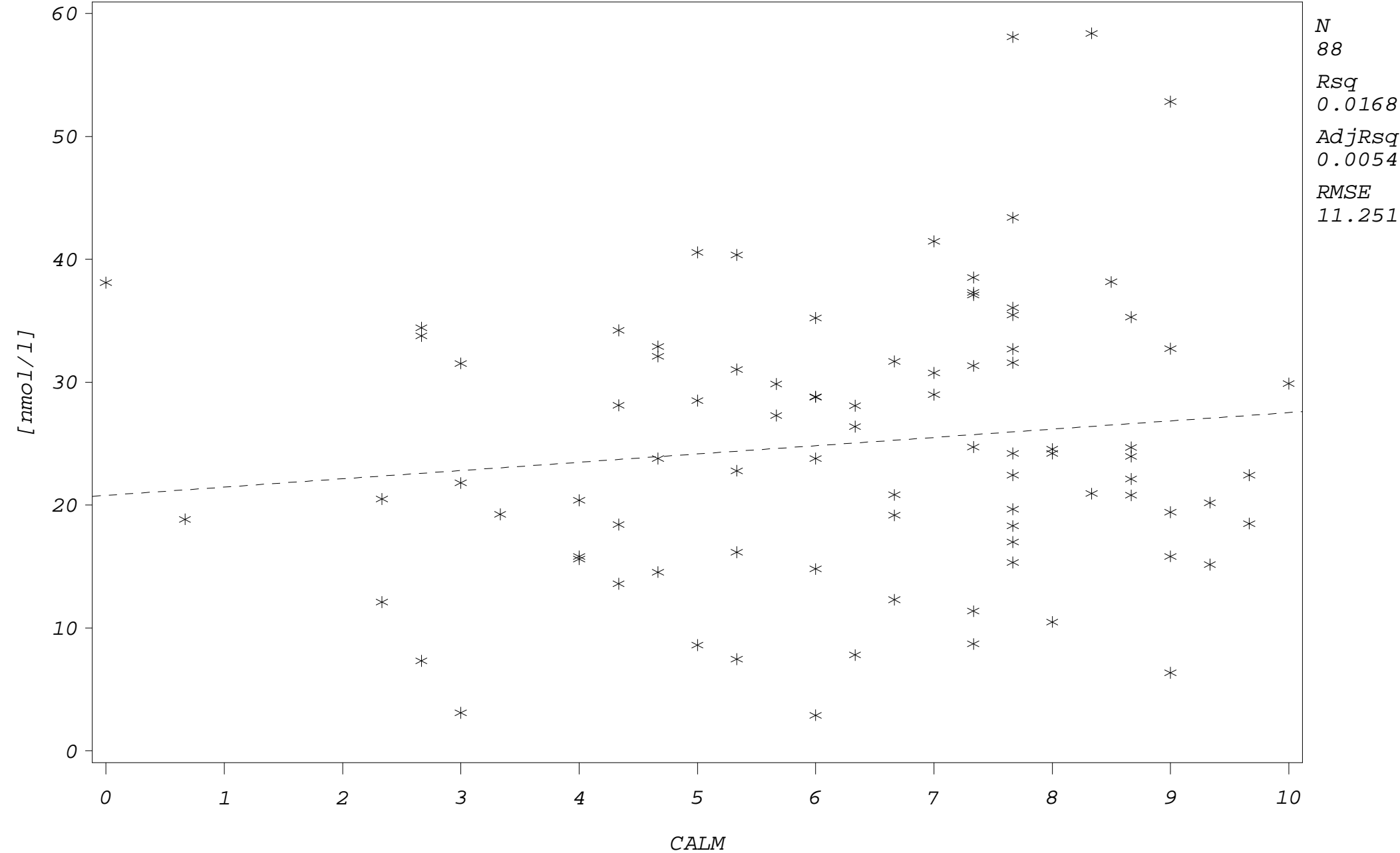
Study 2: cortisol levels * calmness (by occupational group)

occupational group=3.00 sampling occasion=4



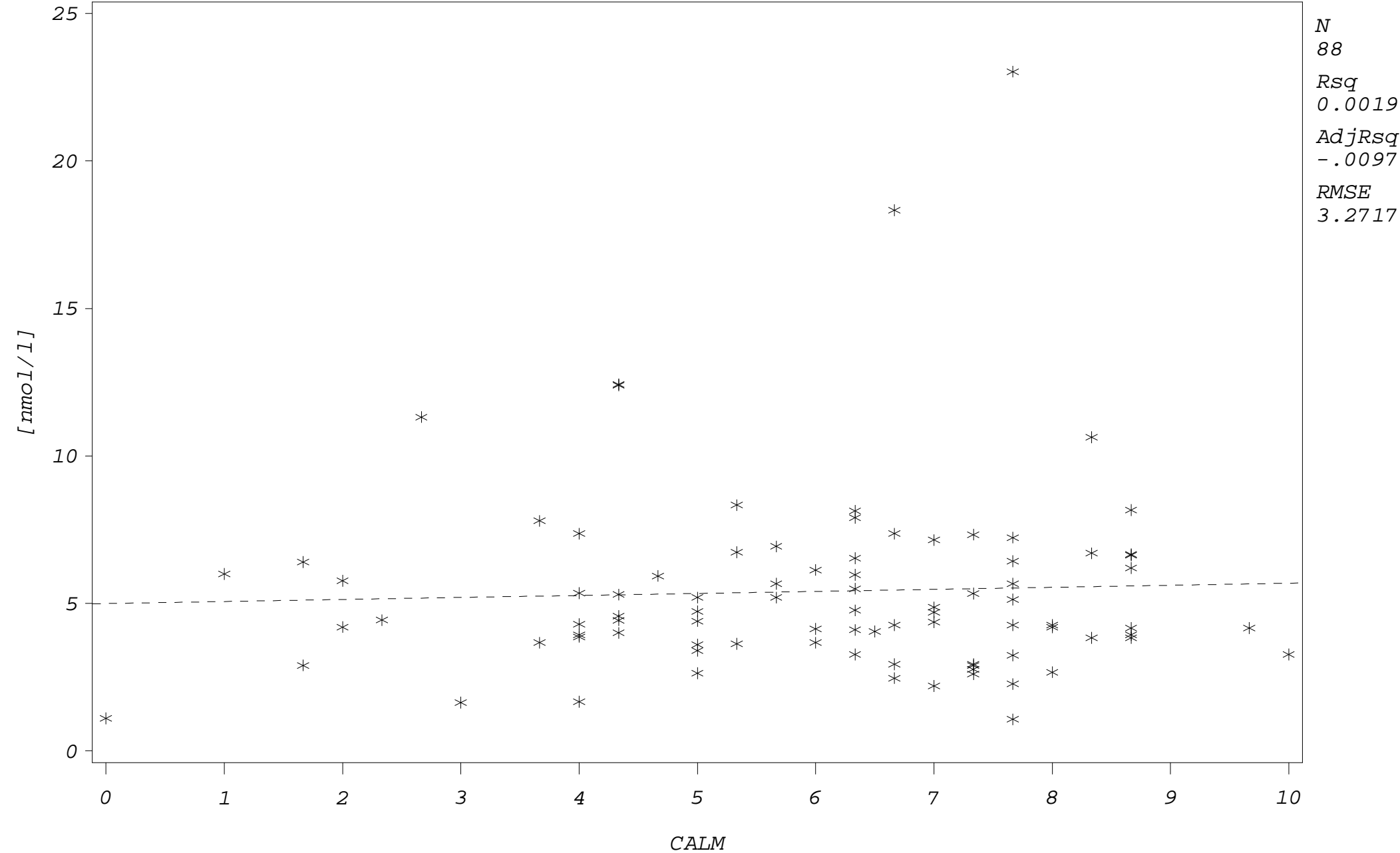
Study 2: cortisol levels * calmness (by occupational group)

occupational group=4.00 sampling occasion=2



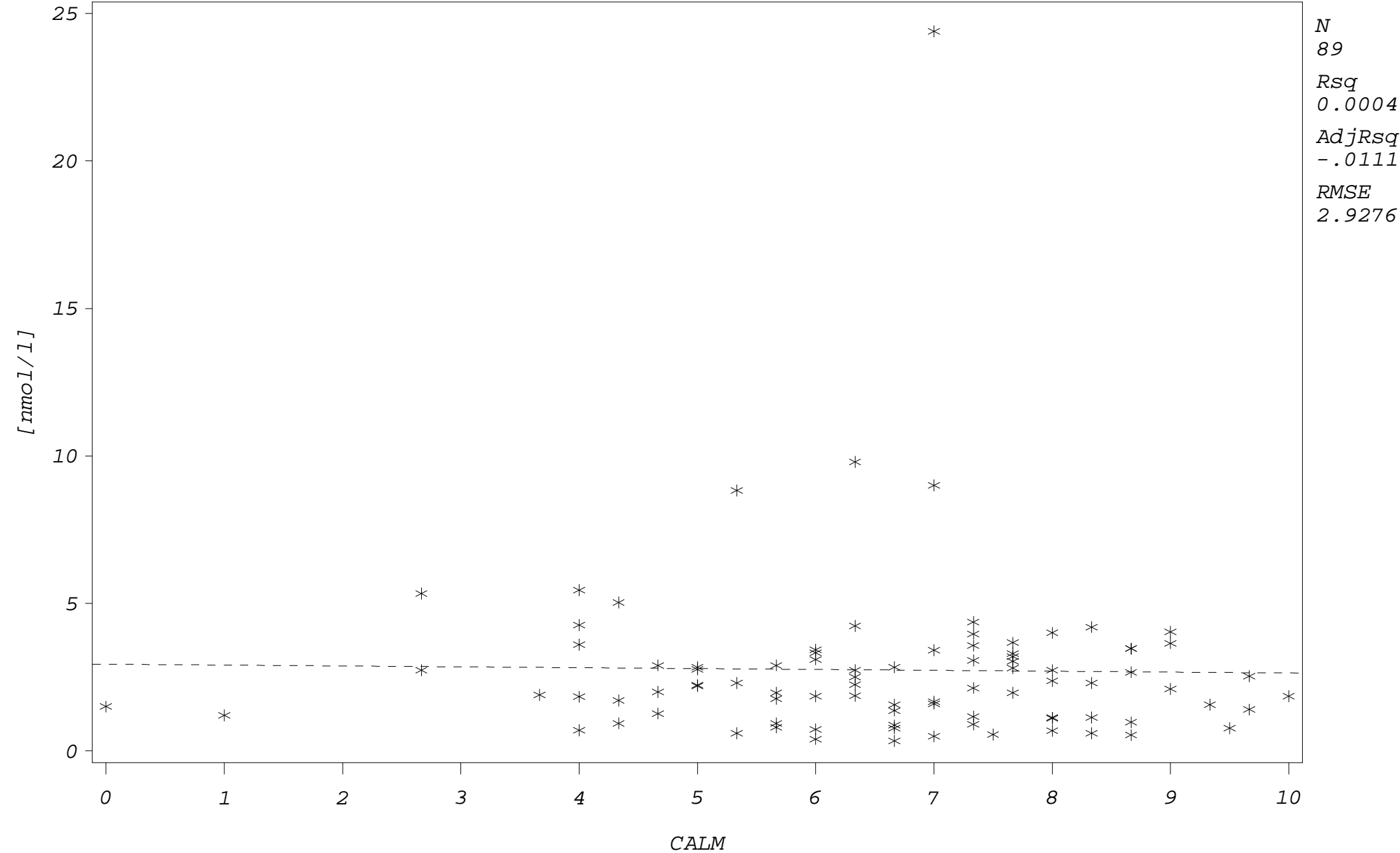
Study 2: cortisol levels * calmness (by occupational group)

occupational group=4.00 sampling occasion=3



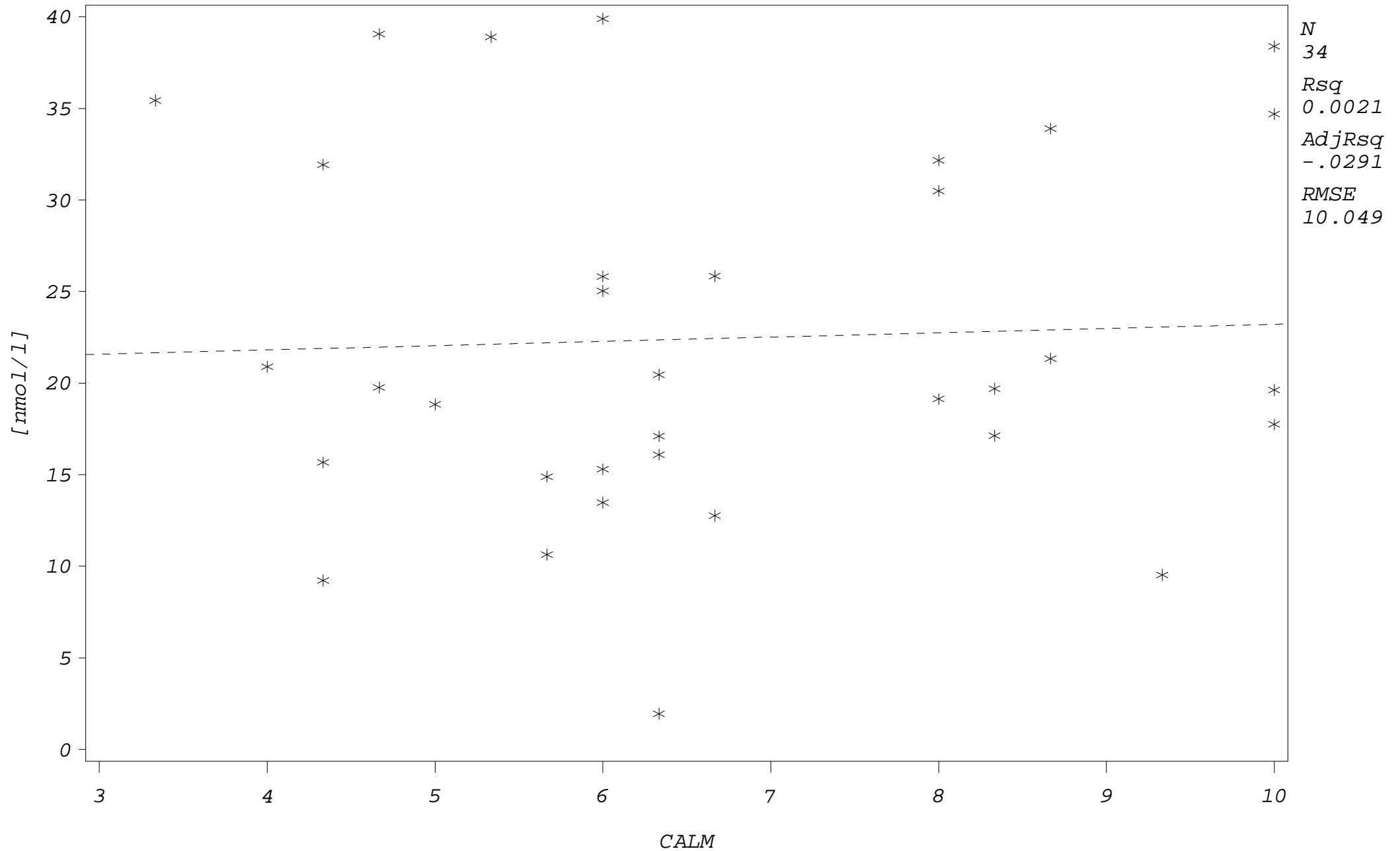
Study 2: cortisol levels * calmness (by occupational group)

occupational group=4.00 sampling occasion=4



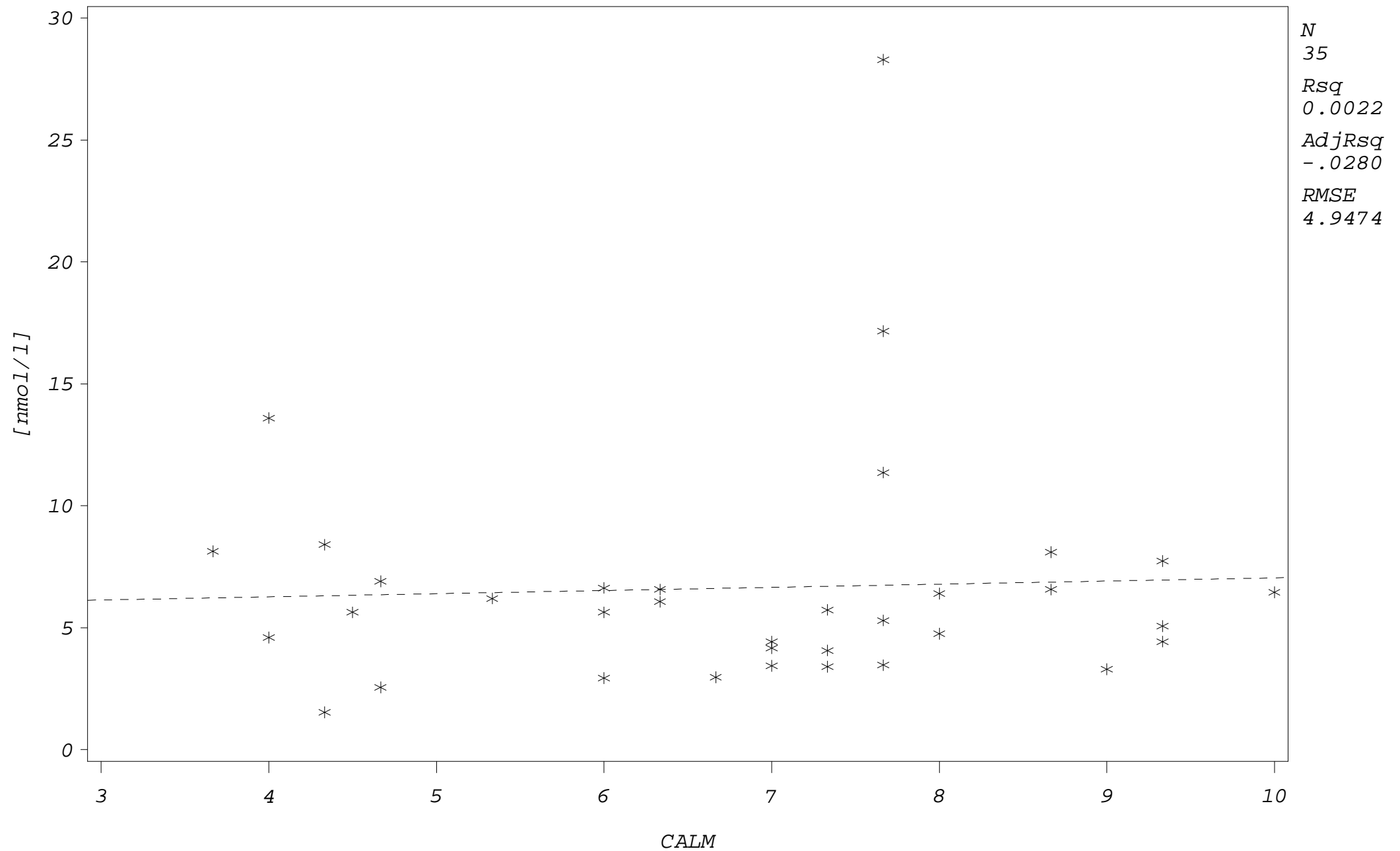
Study 2: cortisol levels * calmness (by occupational group)

occupational group=5.00 sampling occasion=2



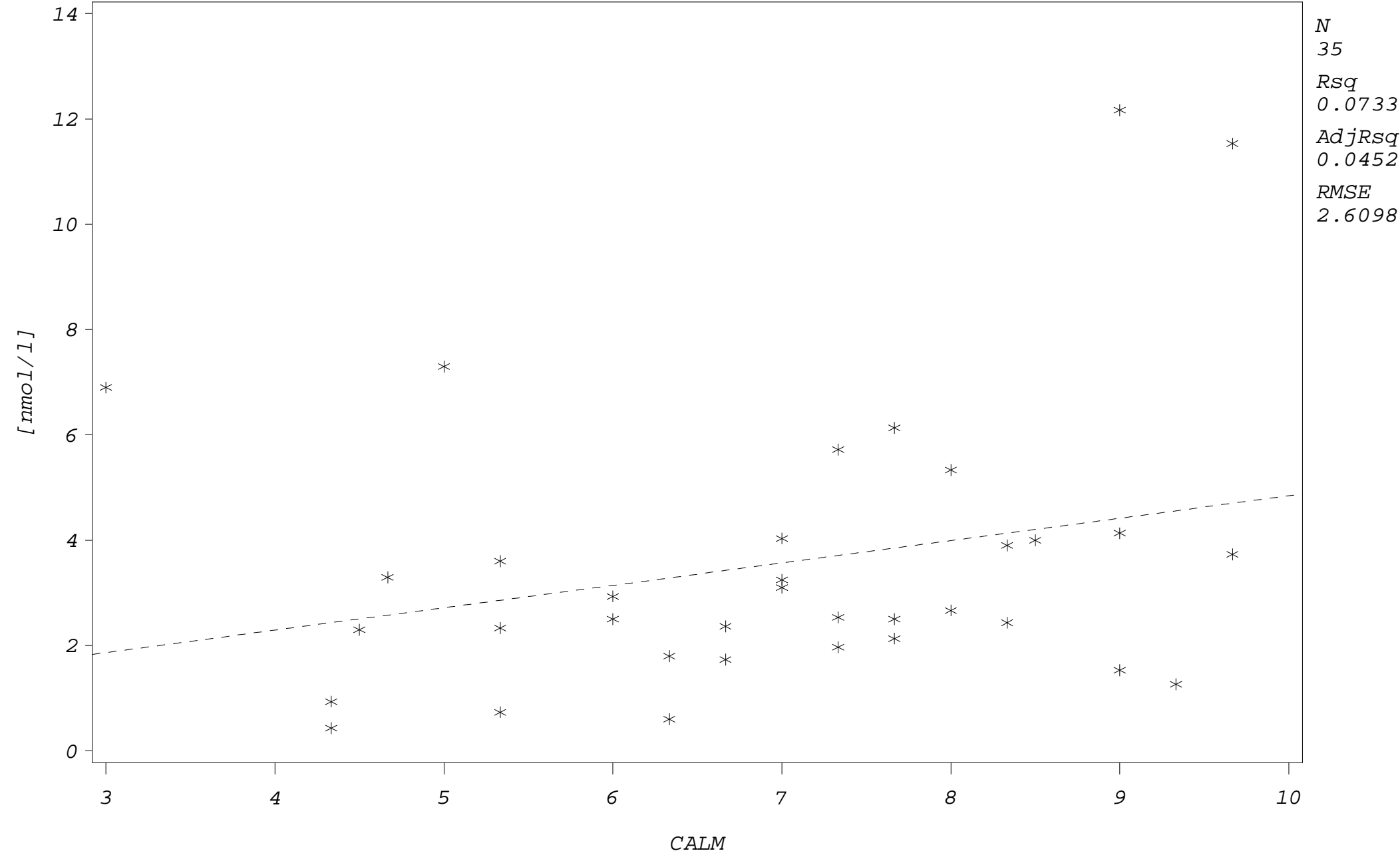
Study 2: cortisol levels * calmness (by occupational group)

occupational group=5.00 sampling occasion=3



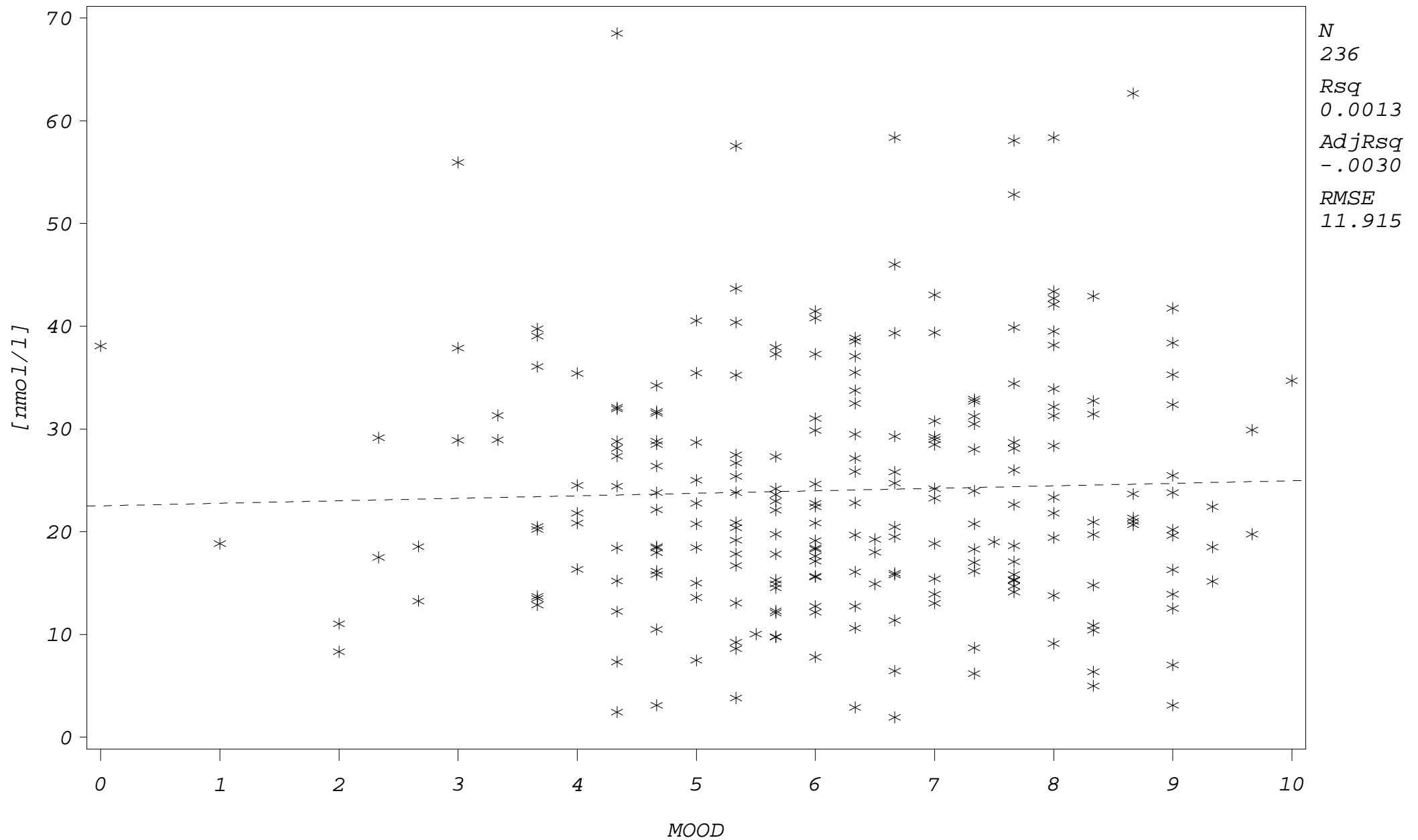
Study 2: cortisol levels * calmness (by occupational group)

occupational group=5.00 sampling occasion=4



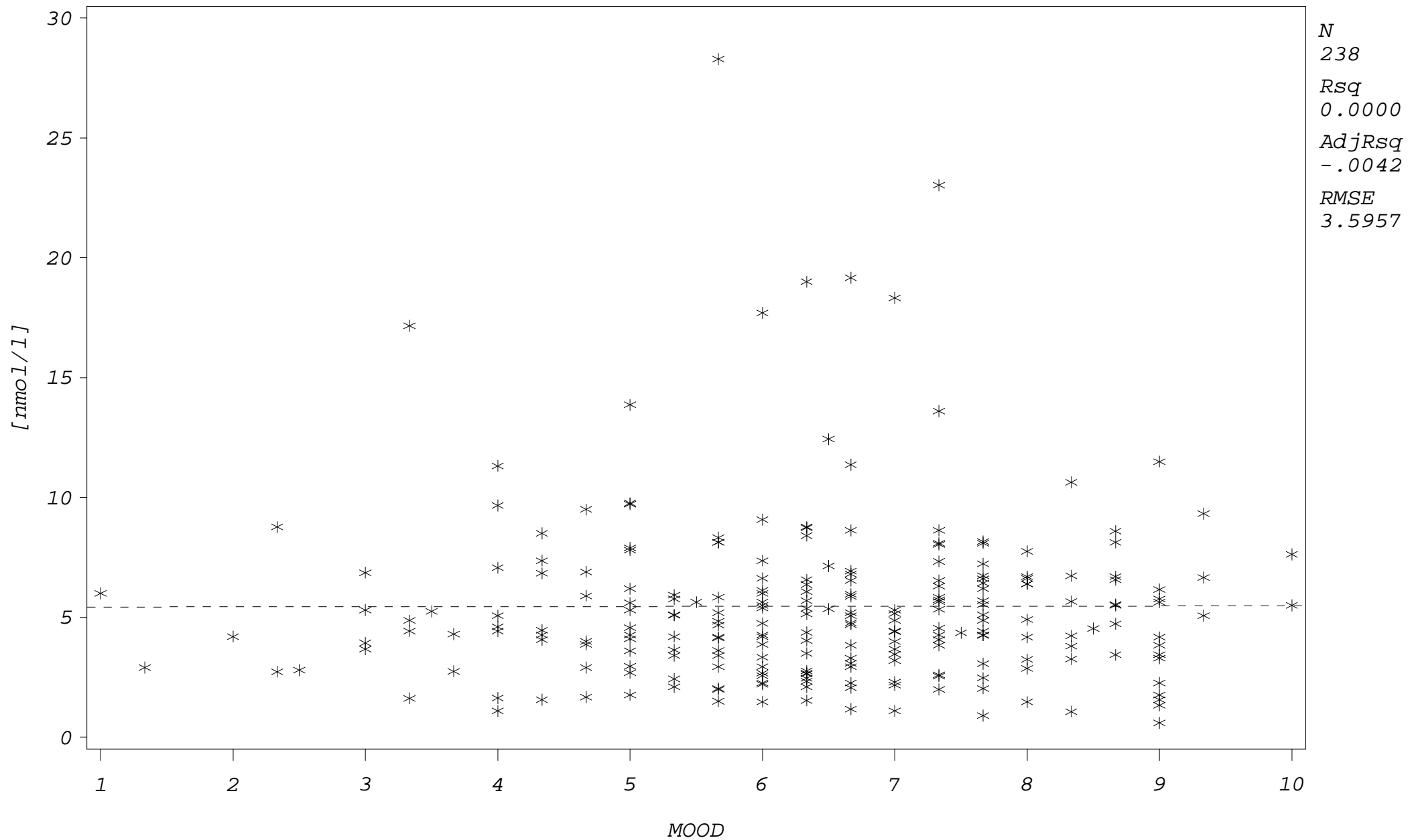
Study 2: cortisol levels * mood (by shift work)

shift work=0 sampling occasion=2



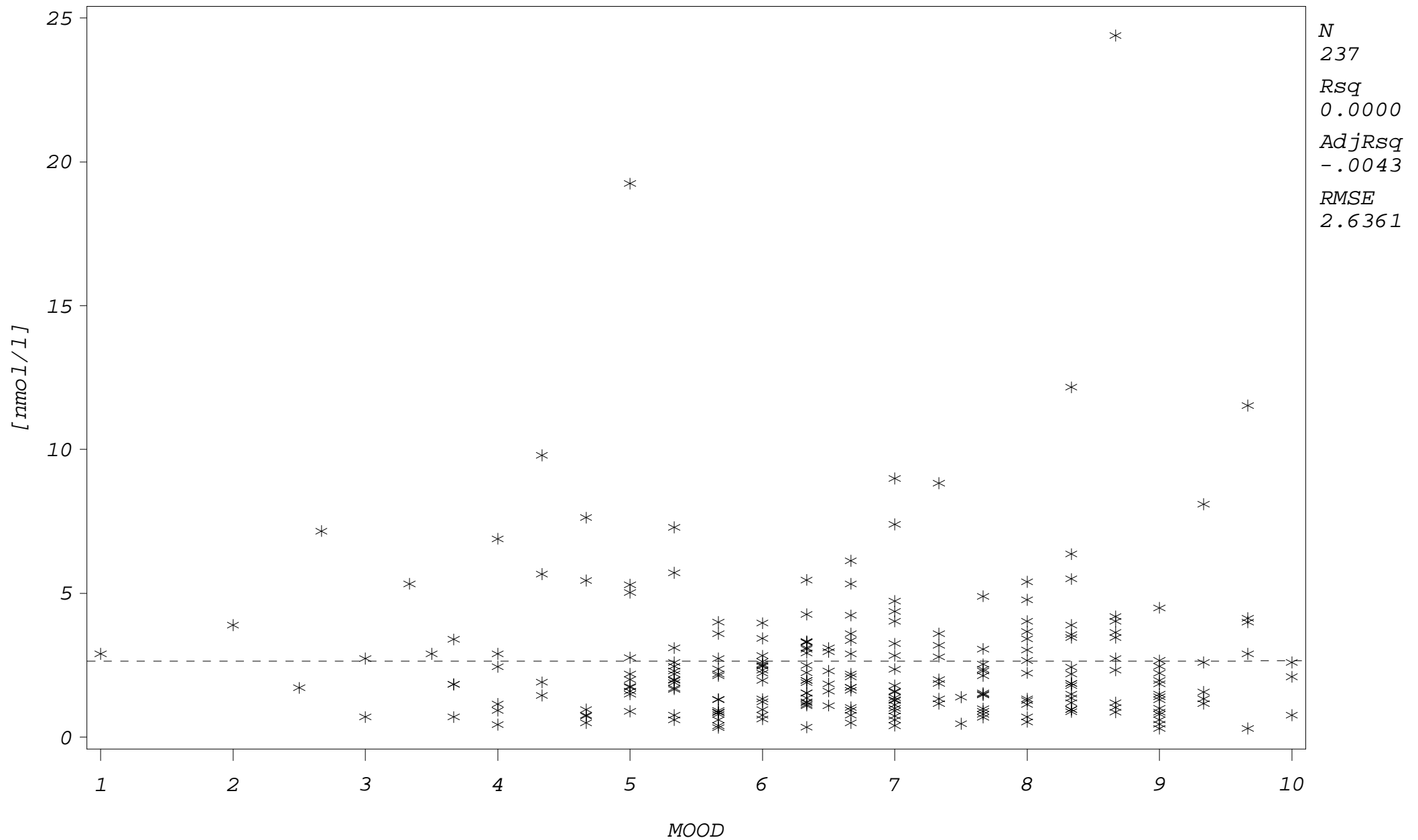
Study 2: cortisol levels * mood (by shift work)

shift work=0 sampling occasion=3



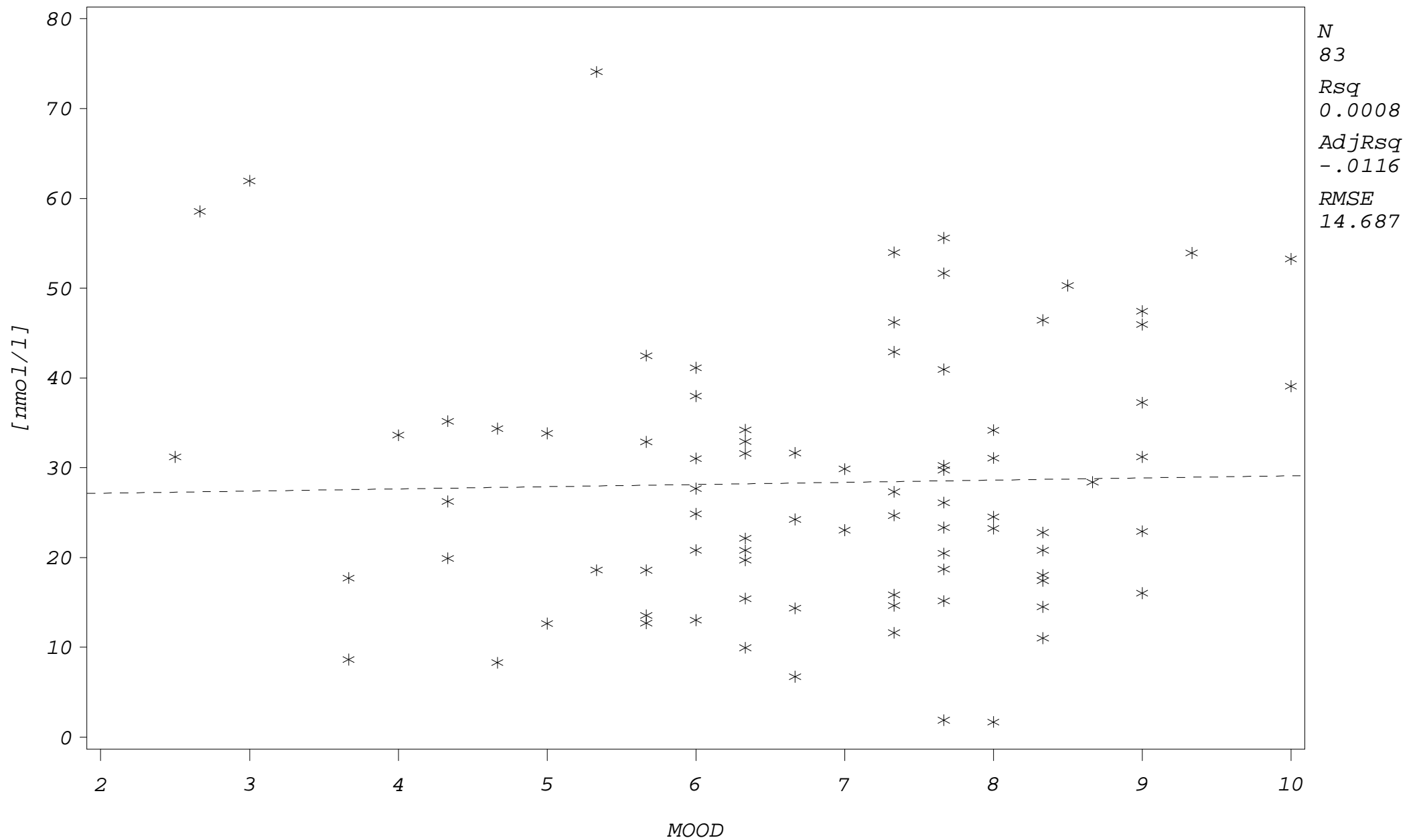
Study 2: cortisol levels * mood (by shift work)

shift work=0 sampling occasion=4



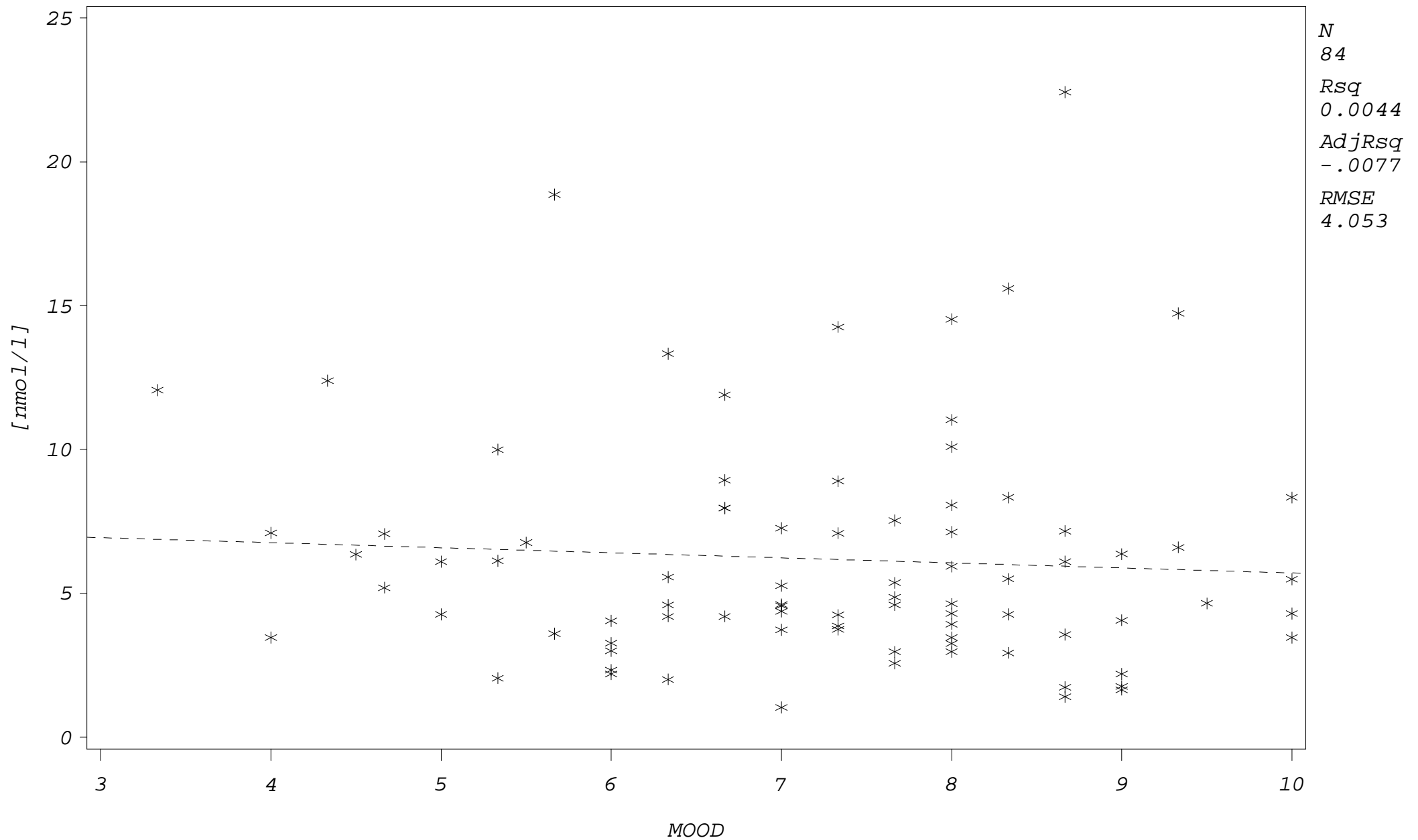
Study 2: cortisol levels * mood (by shift work)

shift work=1 sampling occasion=2



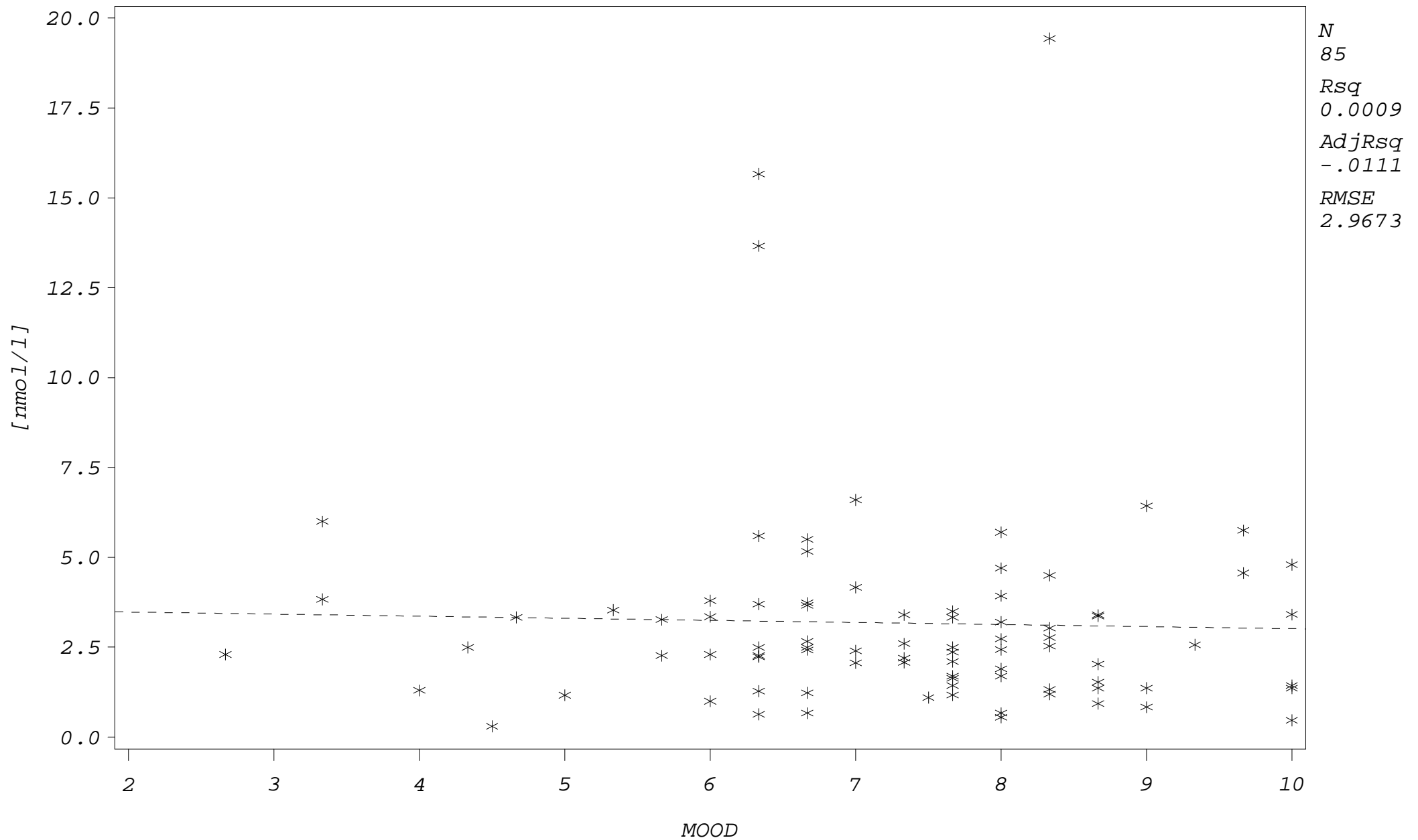
Study 2: cortisol levels * mood (by shift work)

shift work=1 sampling occasion=3



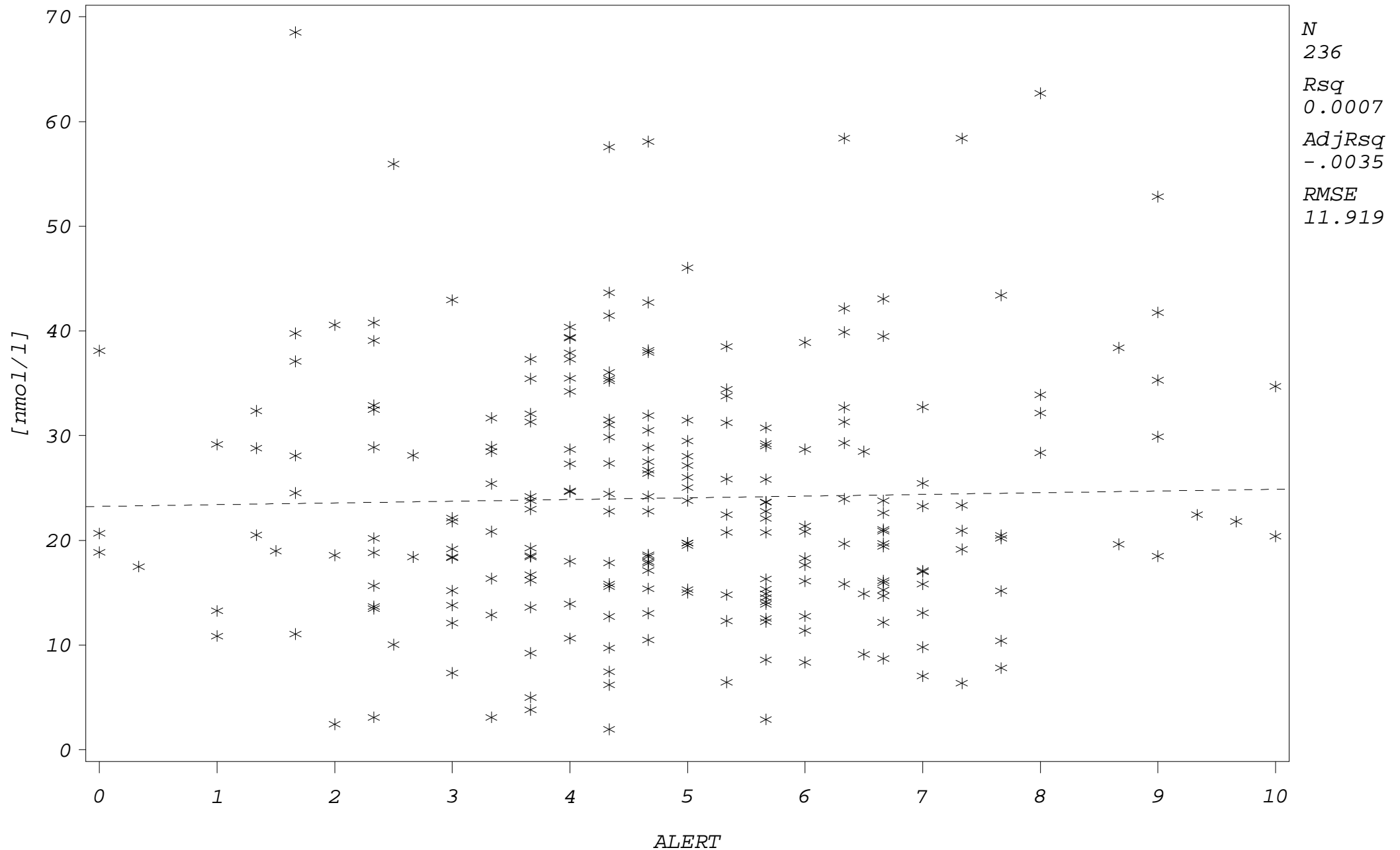
Study 2: cortisol levels * mood (by shift work)

shift work=1 sampling occasion=4



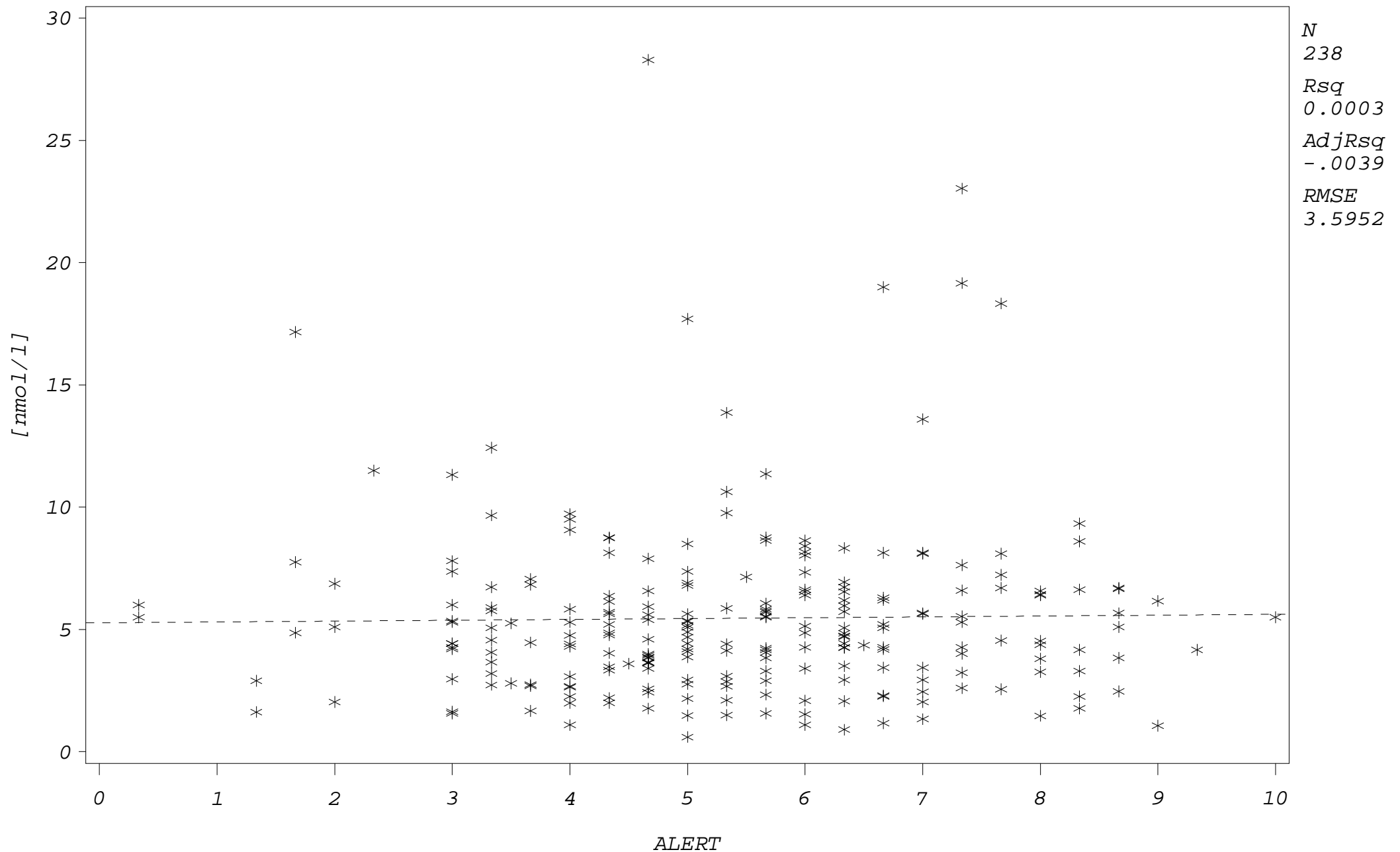
Study 2: cortisol levels * alertness (by shift work)

shift work=0 sampling occasion=2



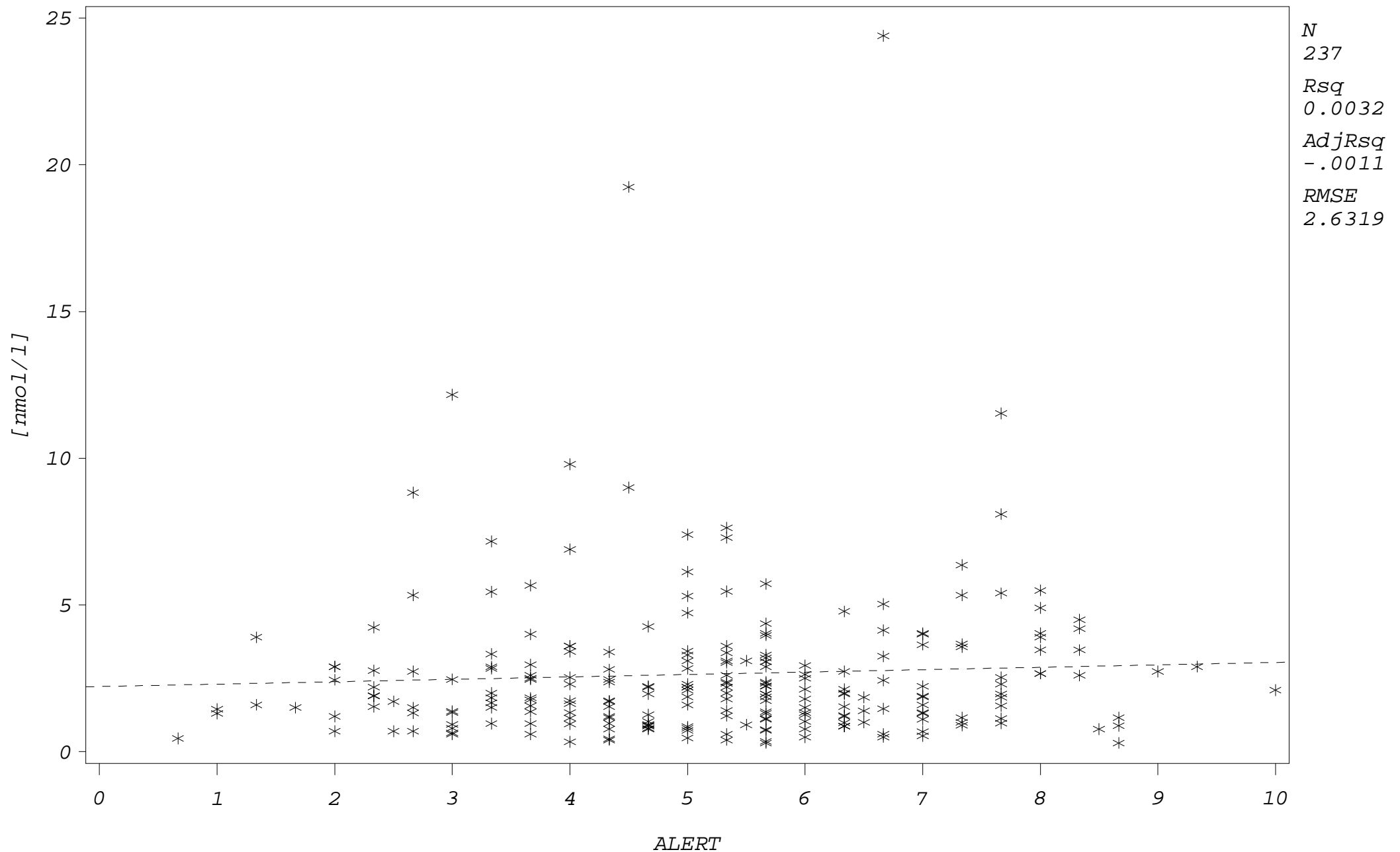
Study 2: cortisol levels * alertness (by shift work)

shift work=0 sampling occasion=3



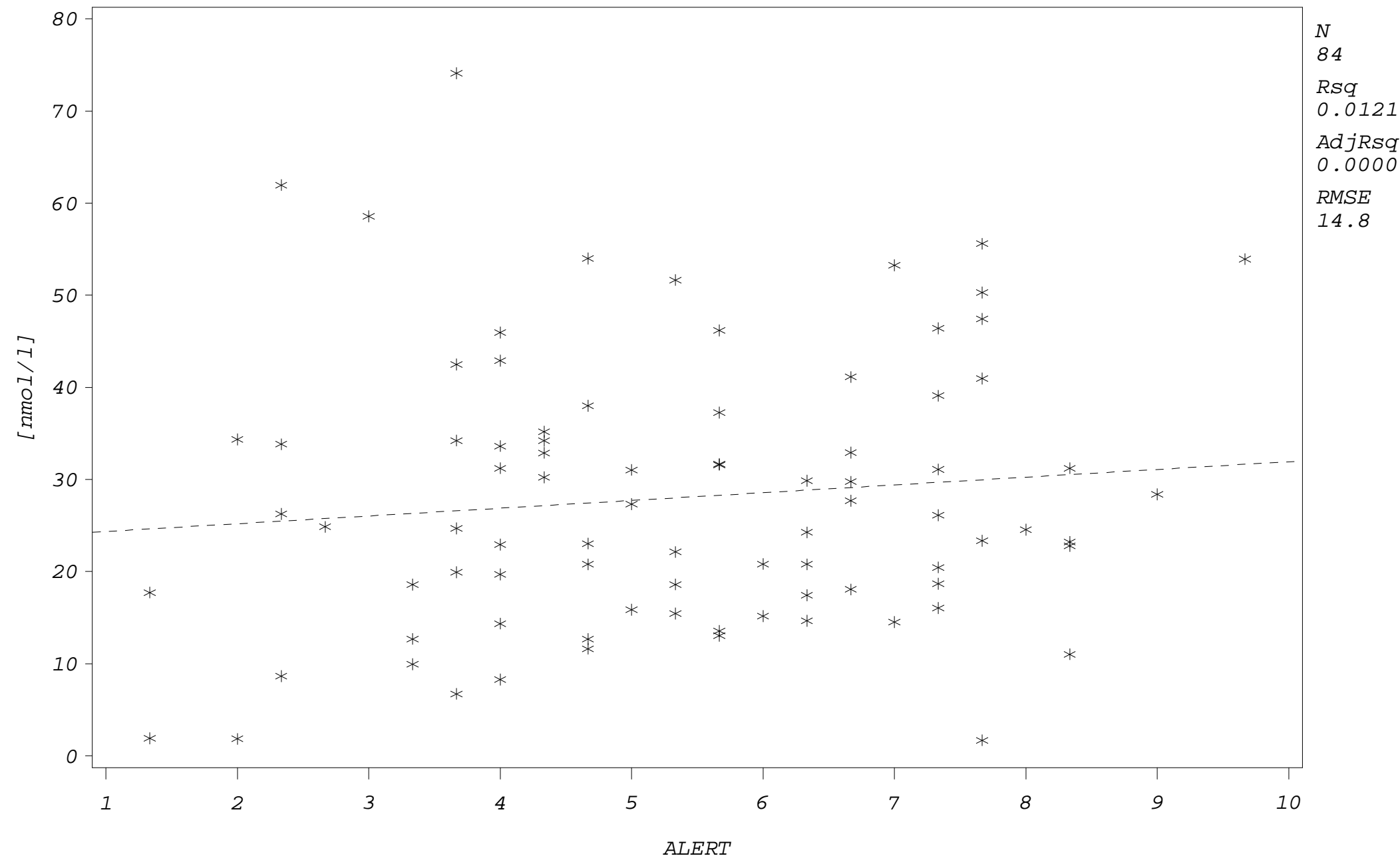
Study 2: cortisol levels * alertness (by shift work)

shift work=0 sampling occasion=4



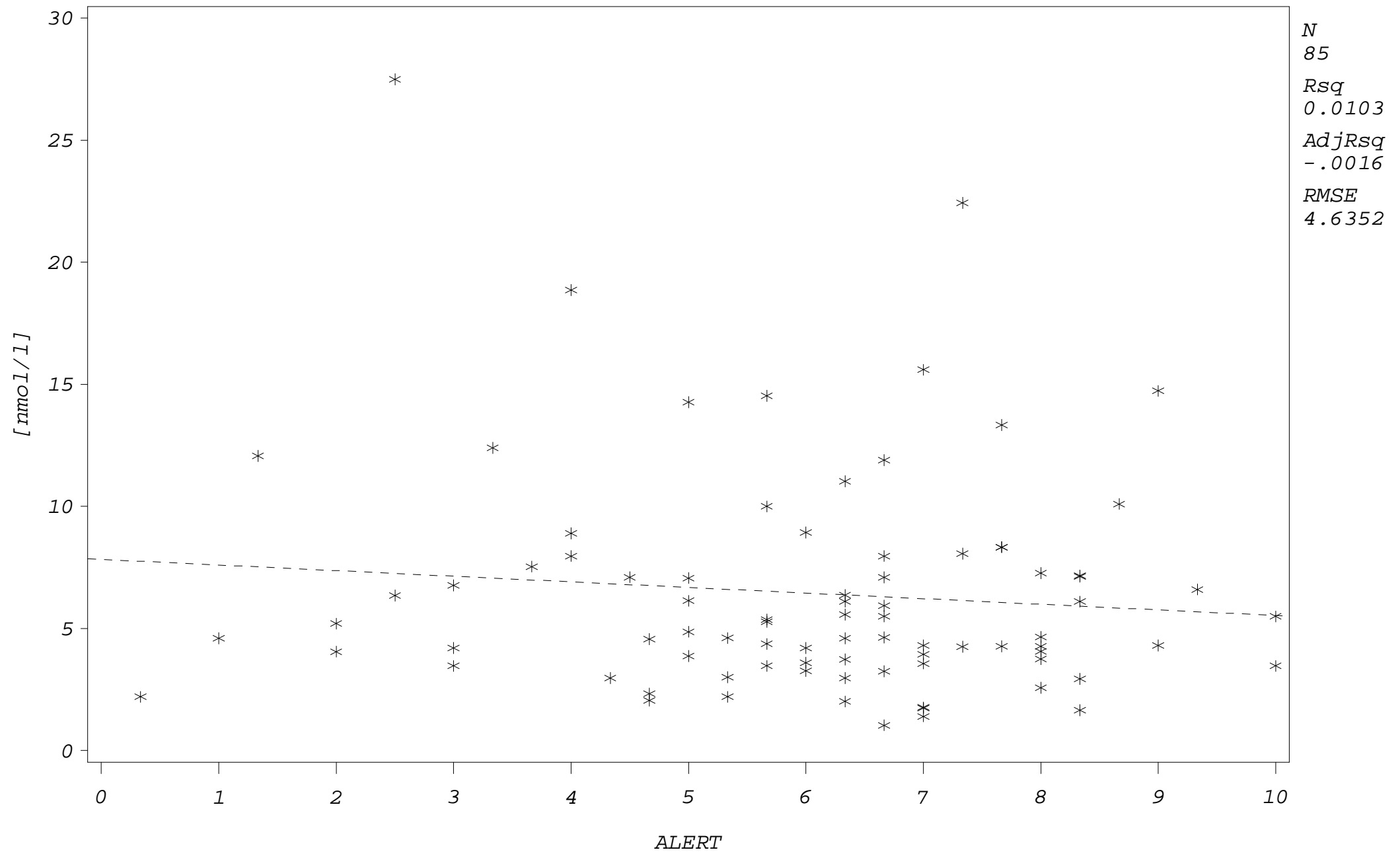
Study 2: cortisol levels * alertness (by shift work)

shift work=1 sampling occasion=2



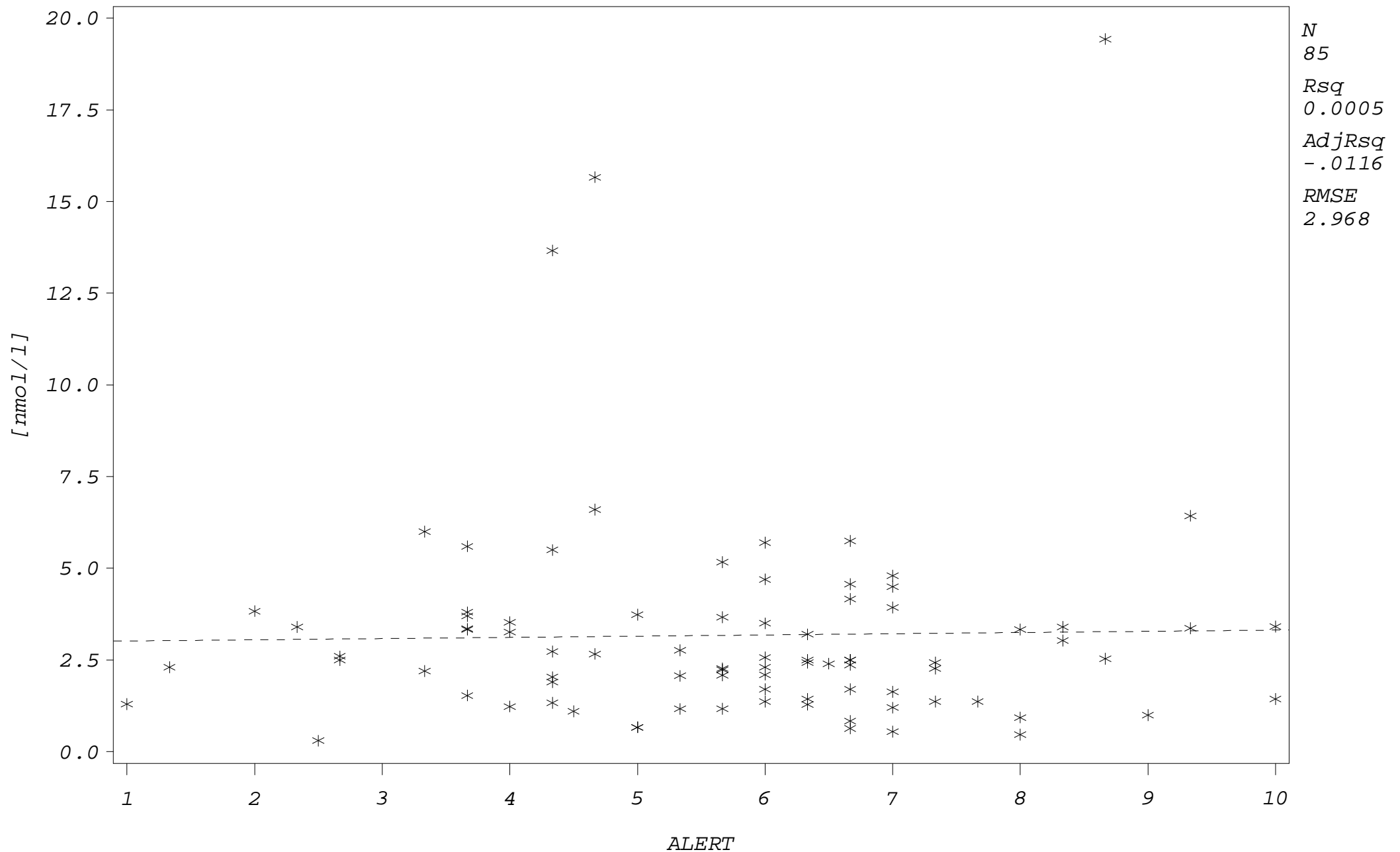
Study 2: cortisol levels * alertness (by shift work)

shift work=1 sampling occasion=3



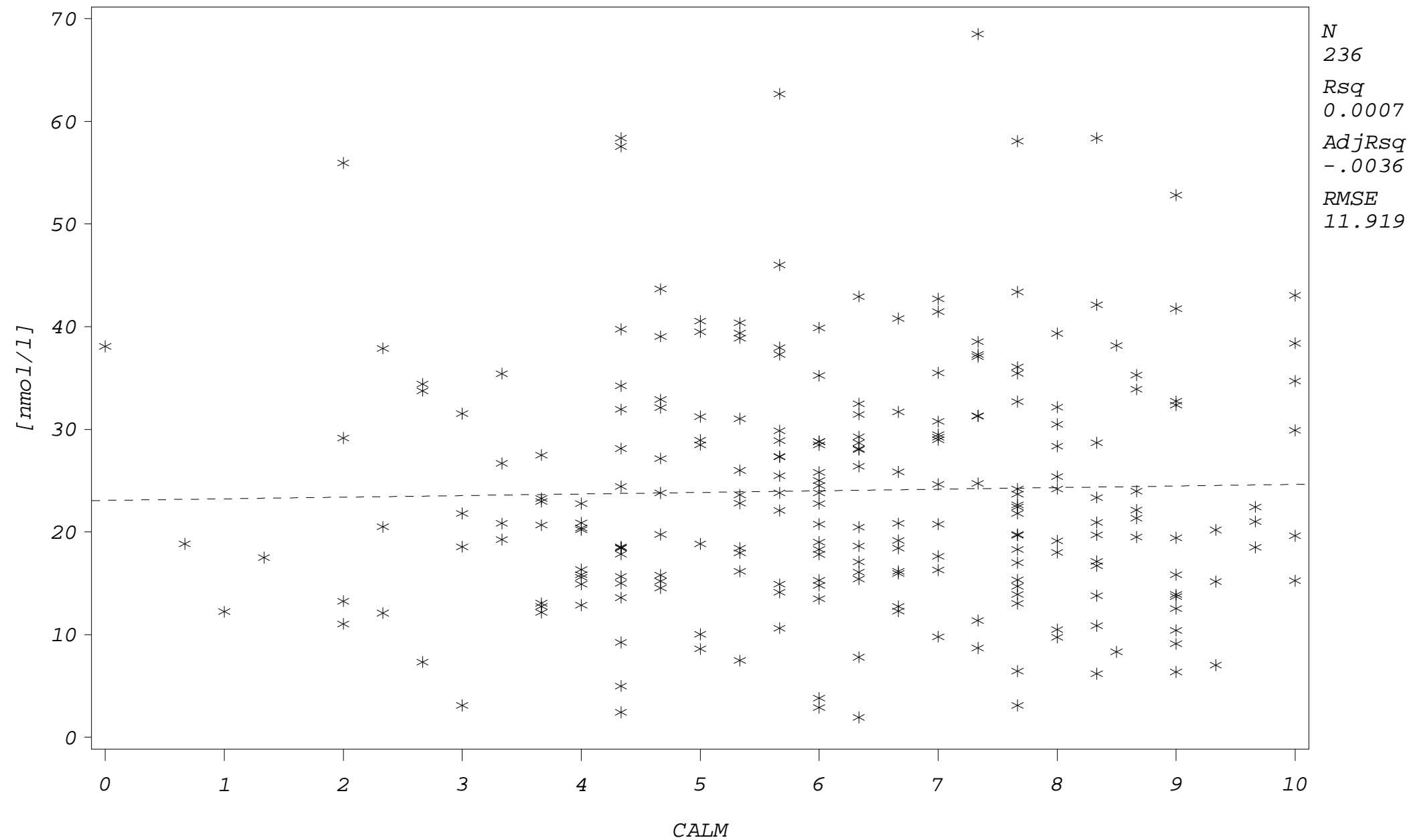
Study 2: cortisol levels * alertness (by shift work)

shift work=1 sampling occasion=4



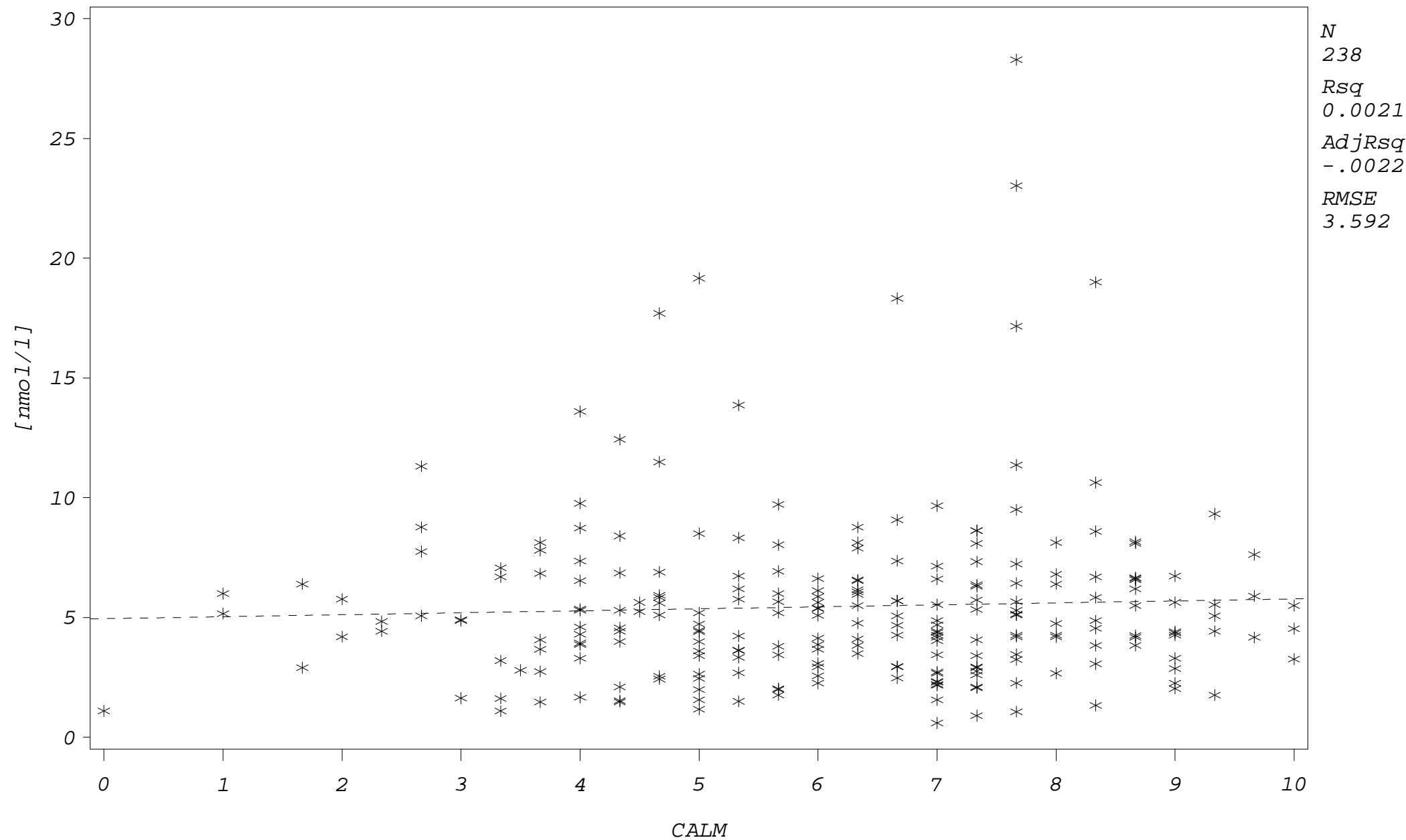
Study 2: cortisol levels * calmness (by shift work)

shift work=0 sampling occasion=2



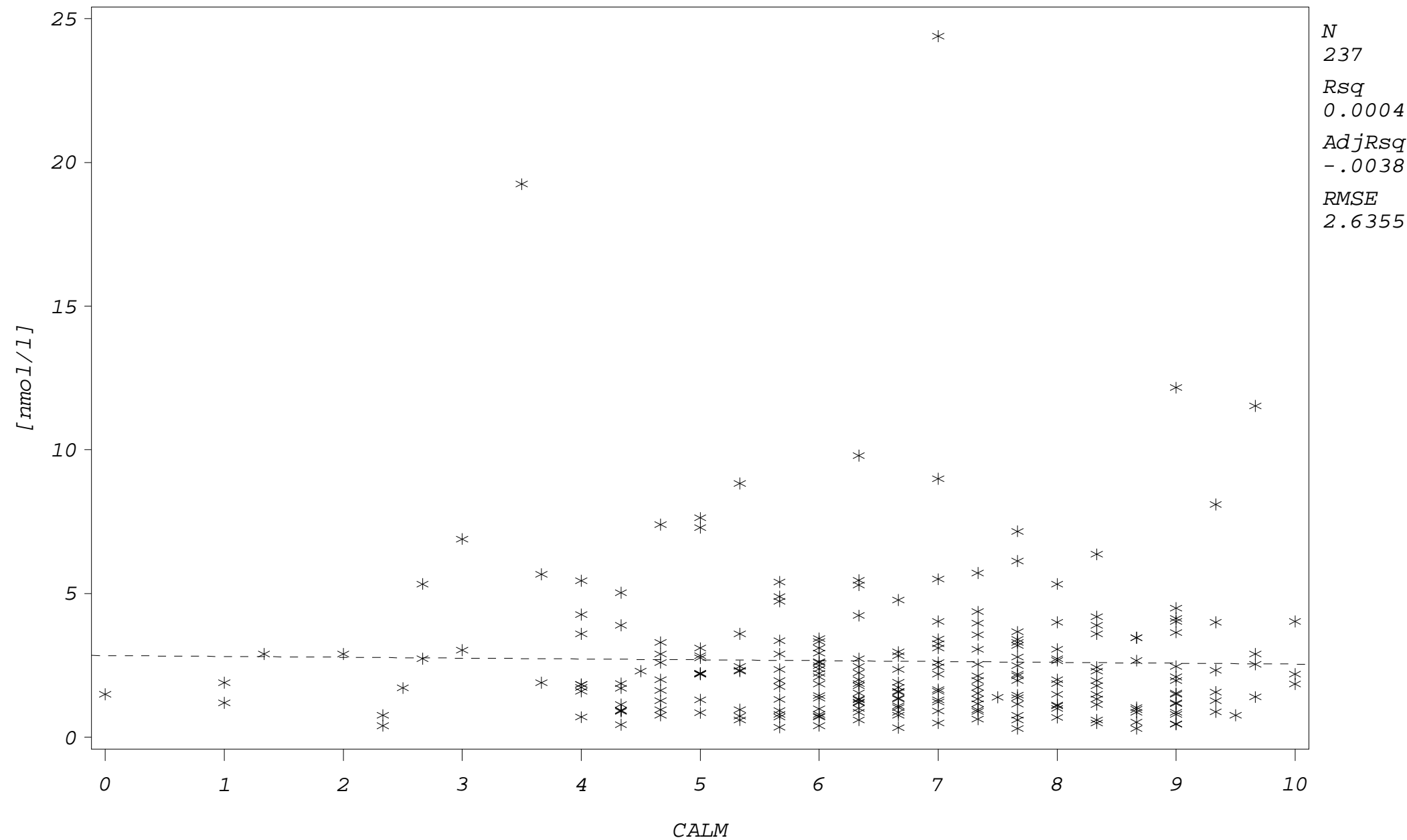
Study 2: cortisol levels * calmness (by shift work)

shift work=0 sampling occasion=3



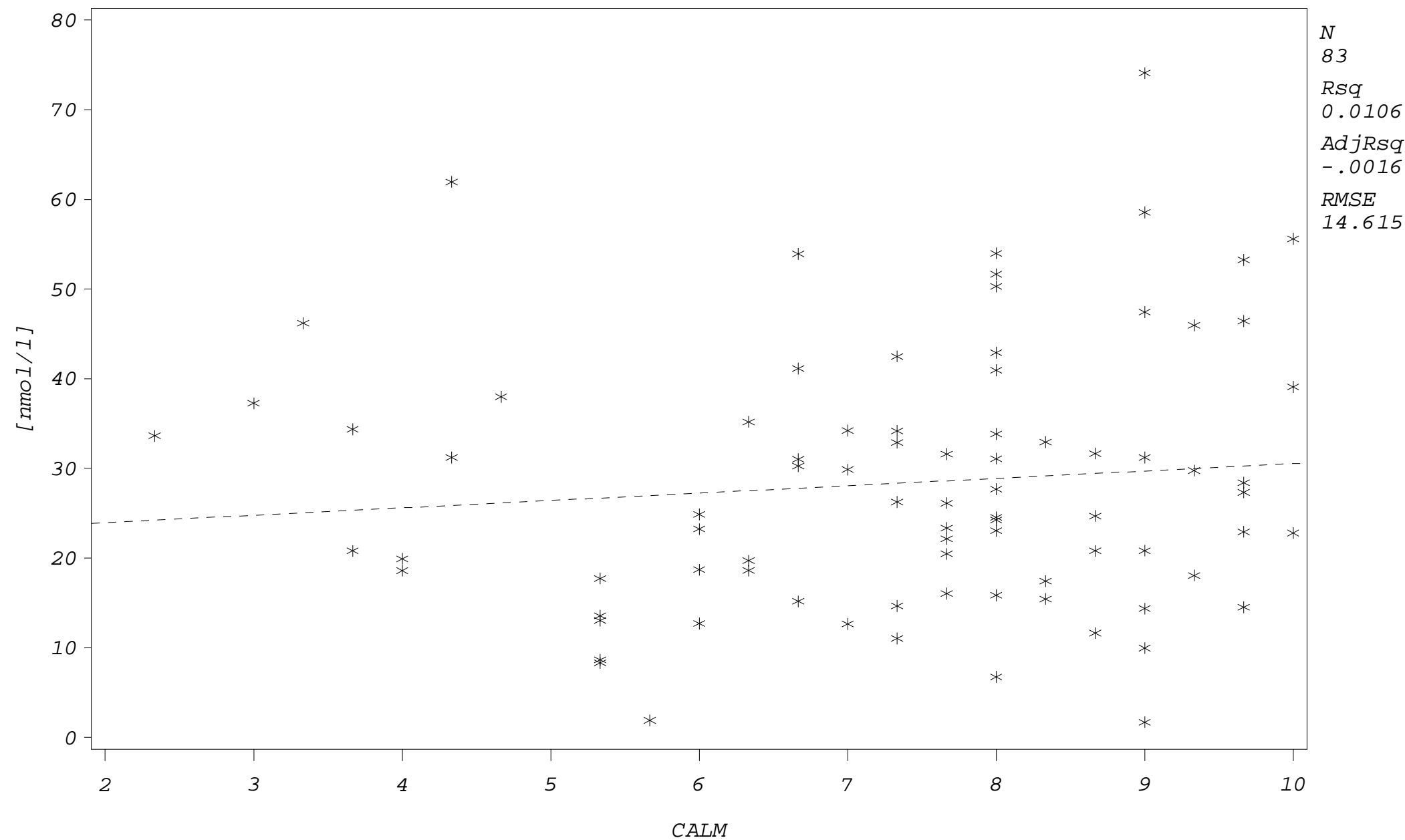
Study 2: cortisol levels * calmness (by shift work)

shift work=0 sampling occasion=4



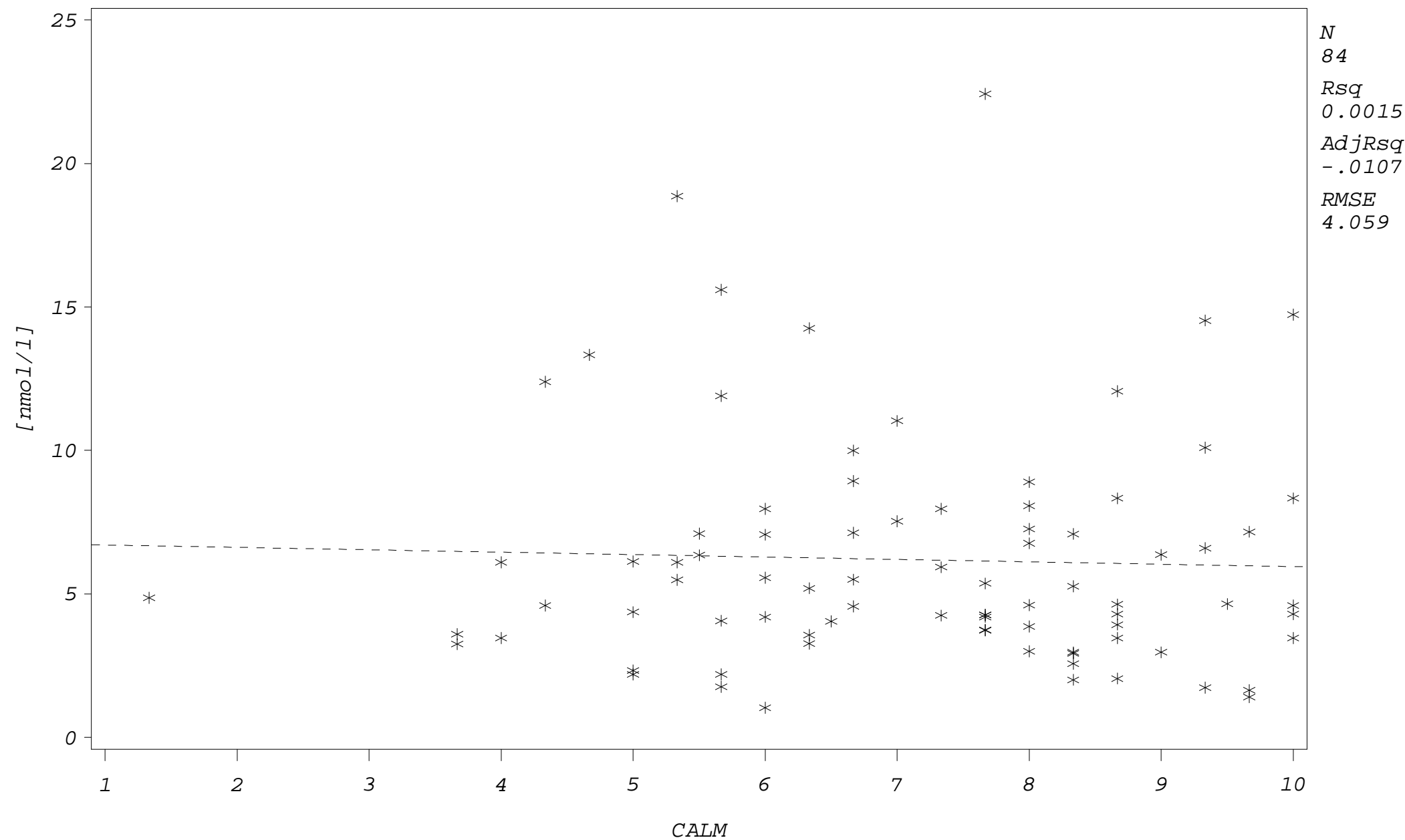
Study 2: cortisol levels * calmness (by shift work)

shift work=1 sampling occasion=2



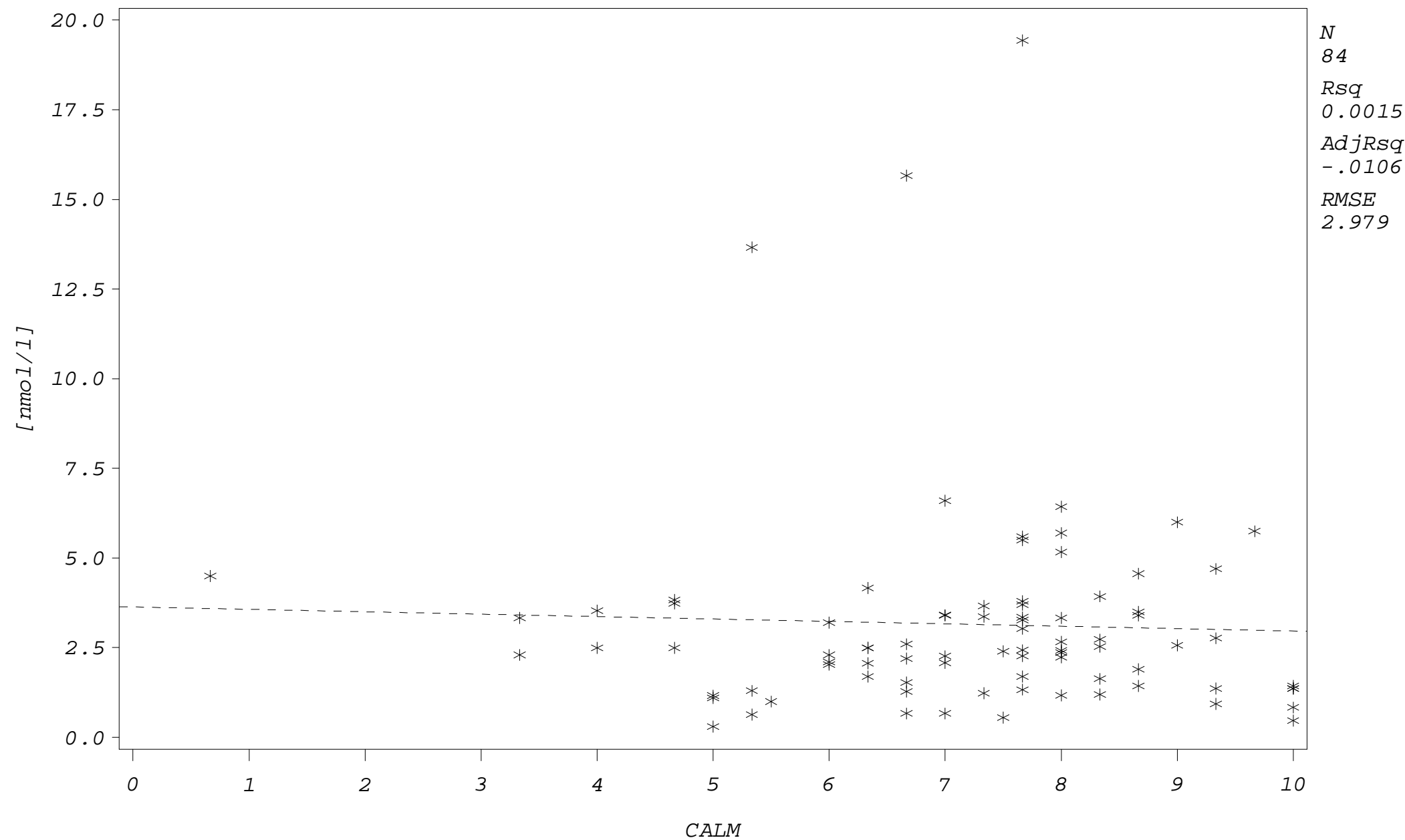
Study 2: cortisol levels * calmness (by shift work)

shift work=1 sampling occasion=3



Study 2: cortisol levels * calmness (by shift work)

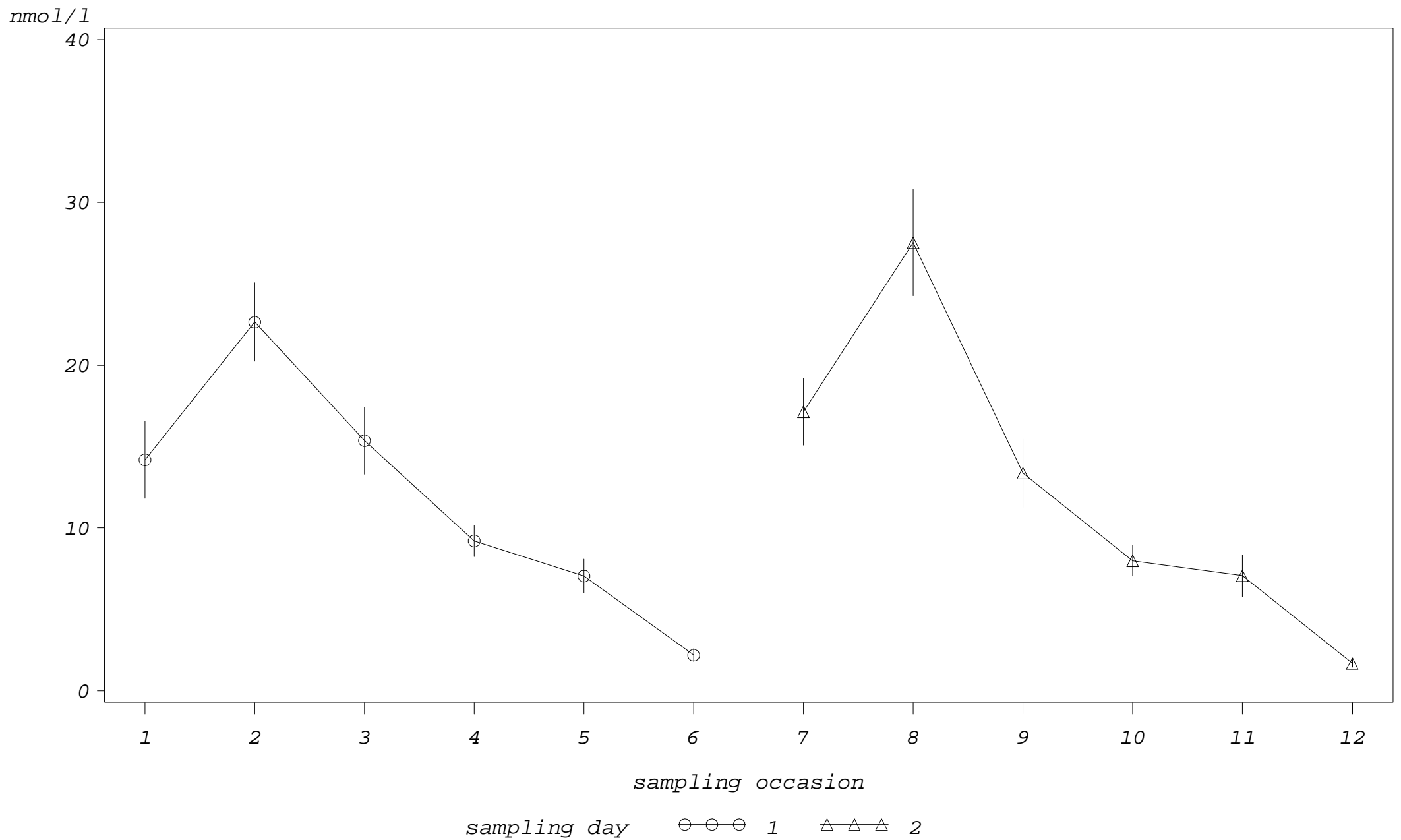
shift work=1 sampling occasion=4



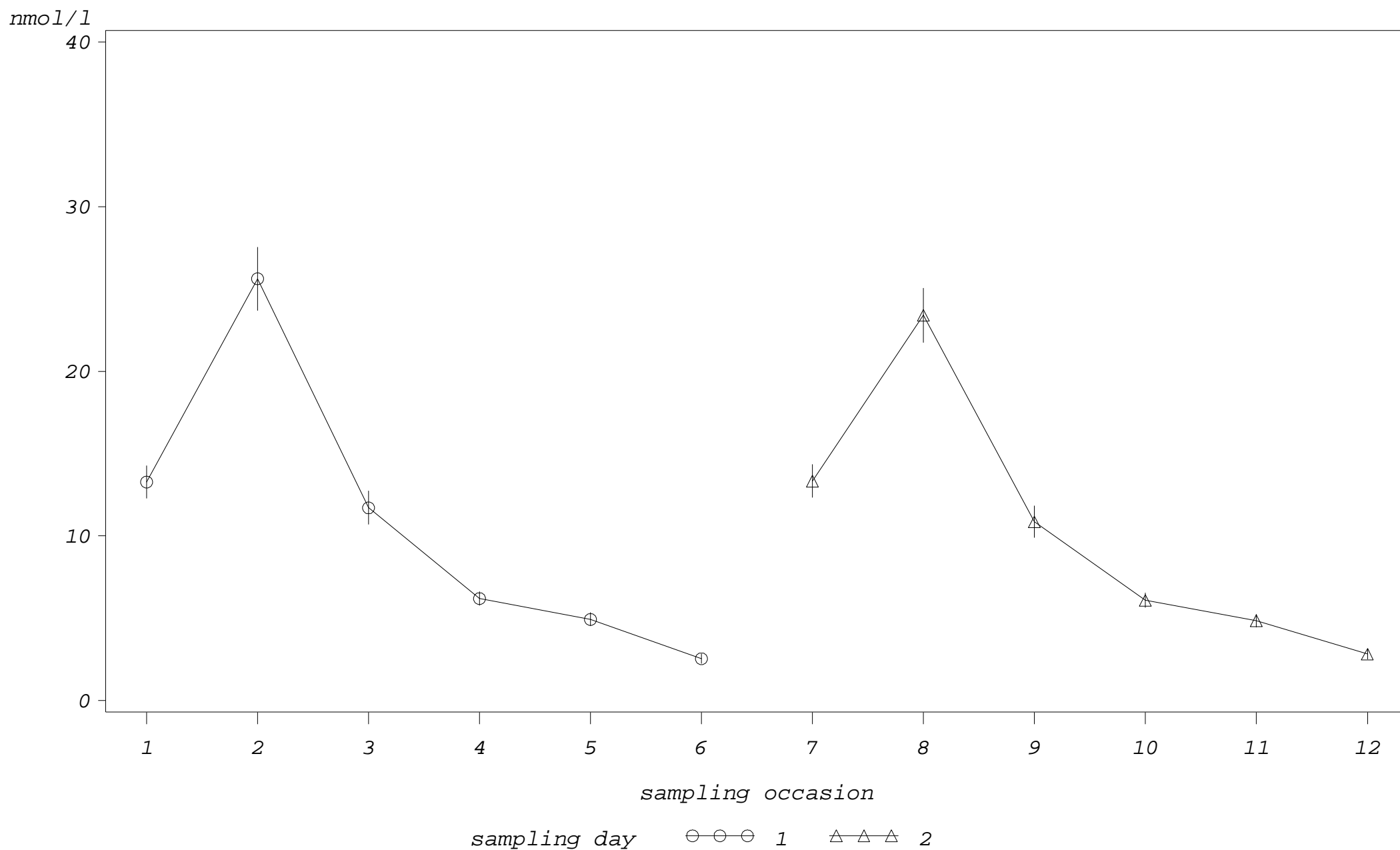
Appendix 5

Stability of Cortisol Profiles

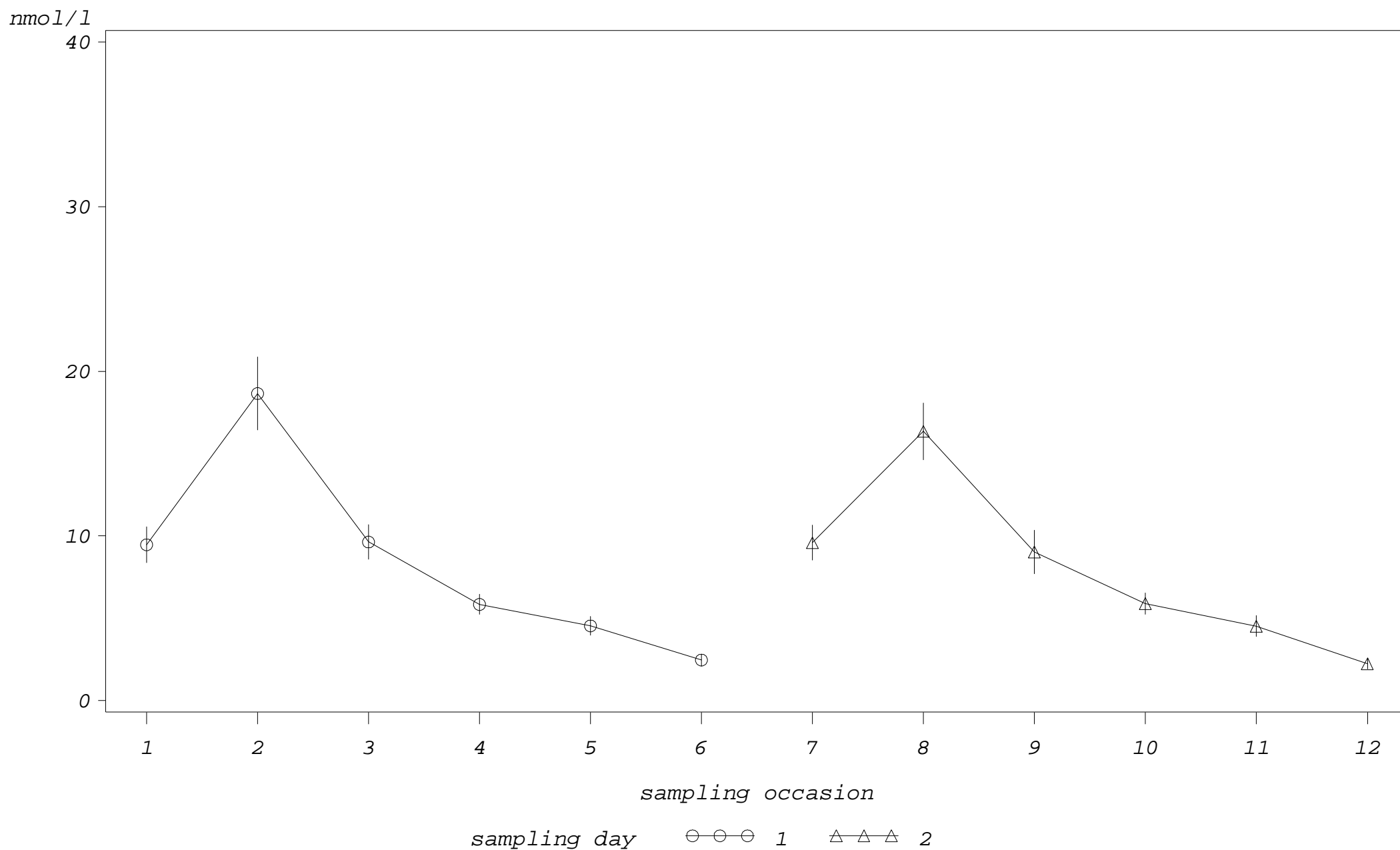
Study 1: diurnal cortisol profiles (men)



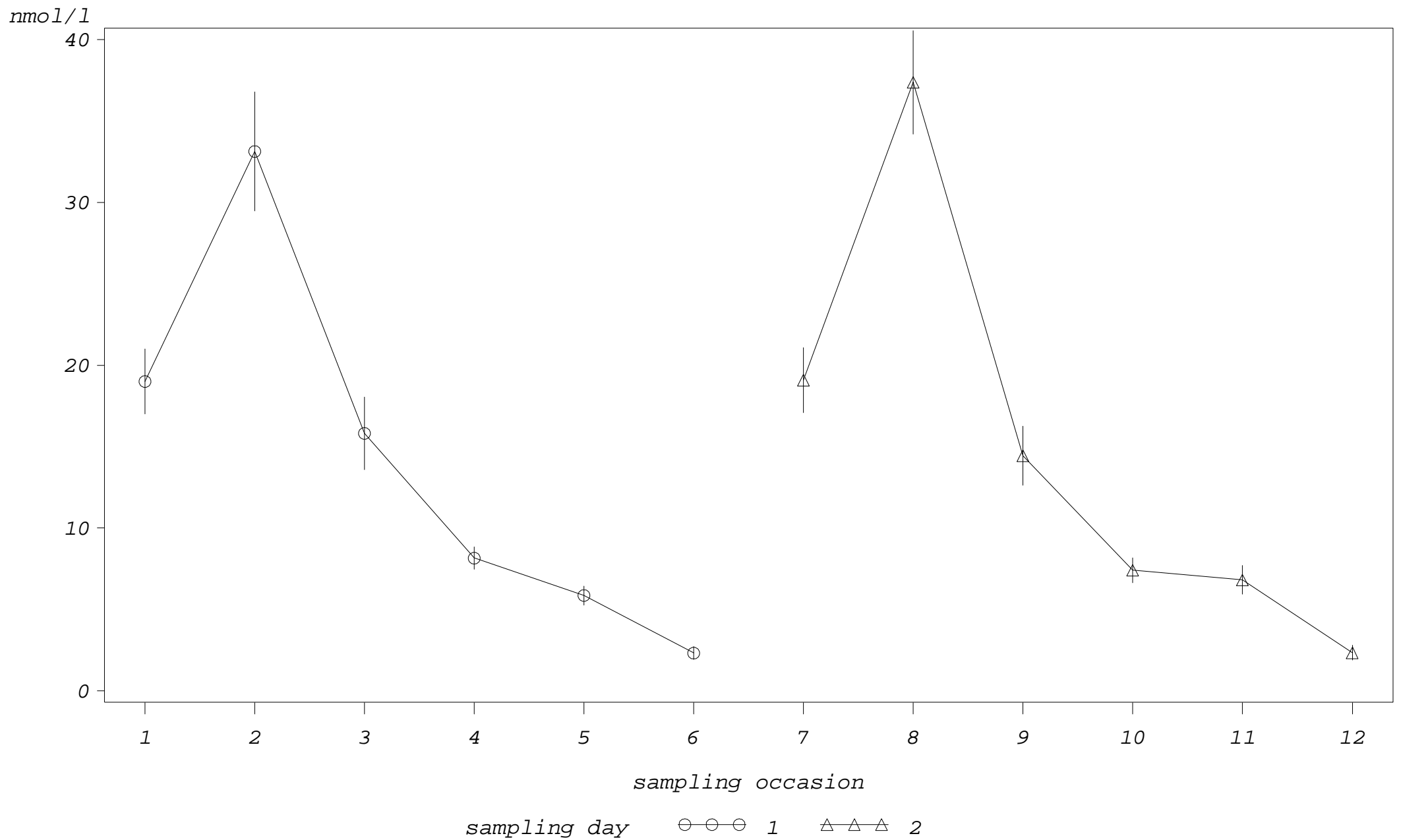
Study 1: diurnal cortisol profiles (women)



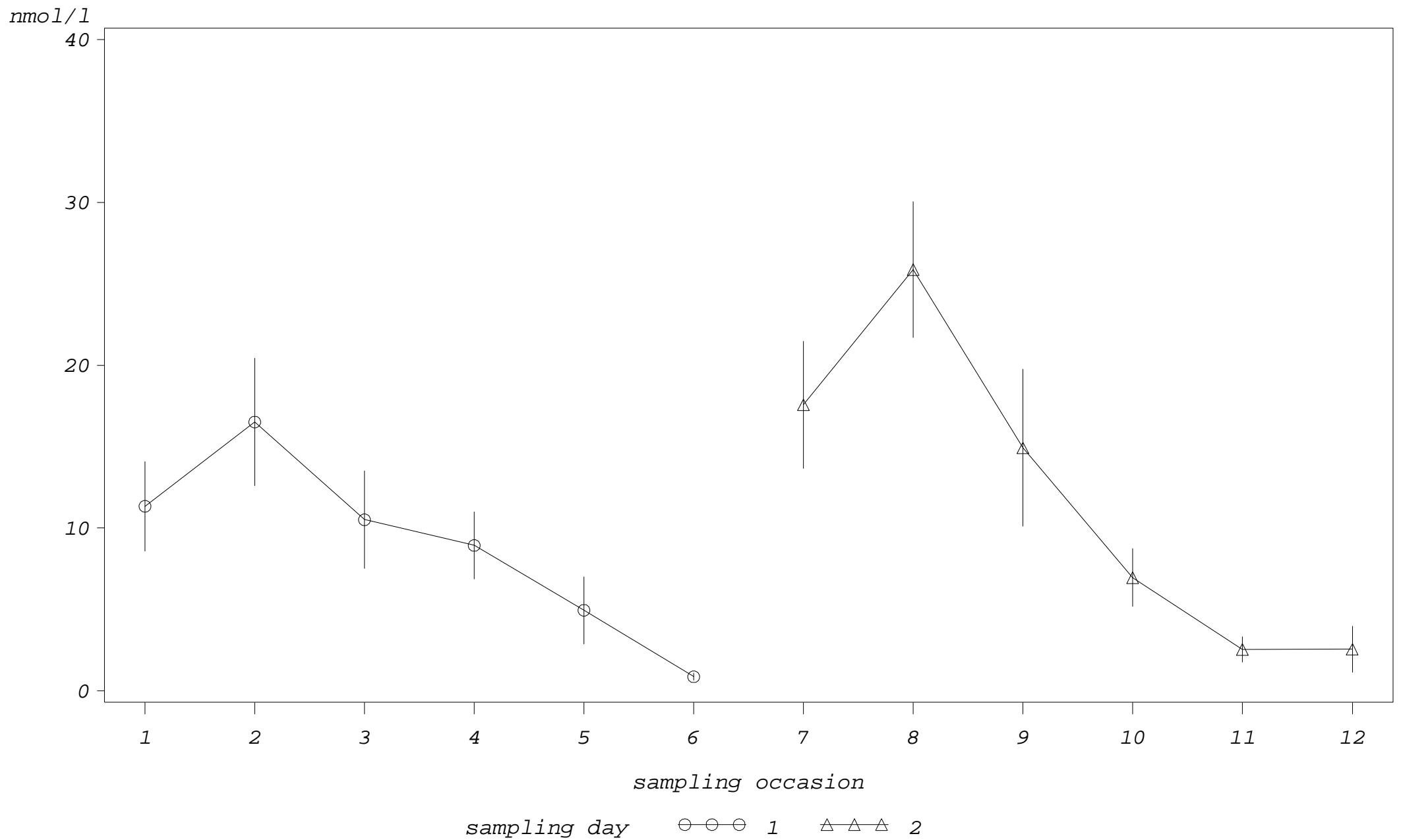
Study 1: diurnal cortisol profiles (nurses)



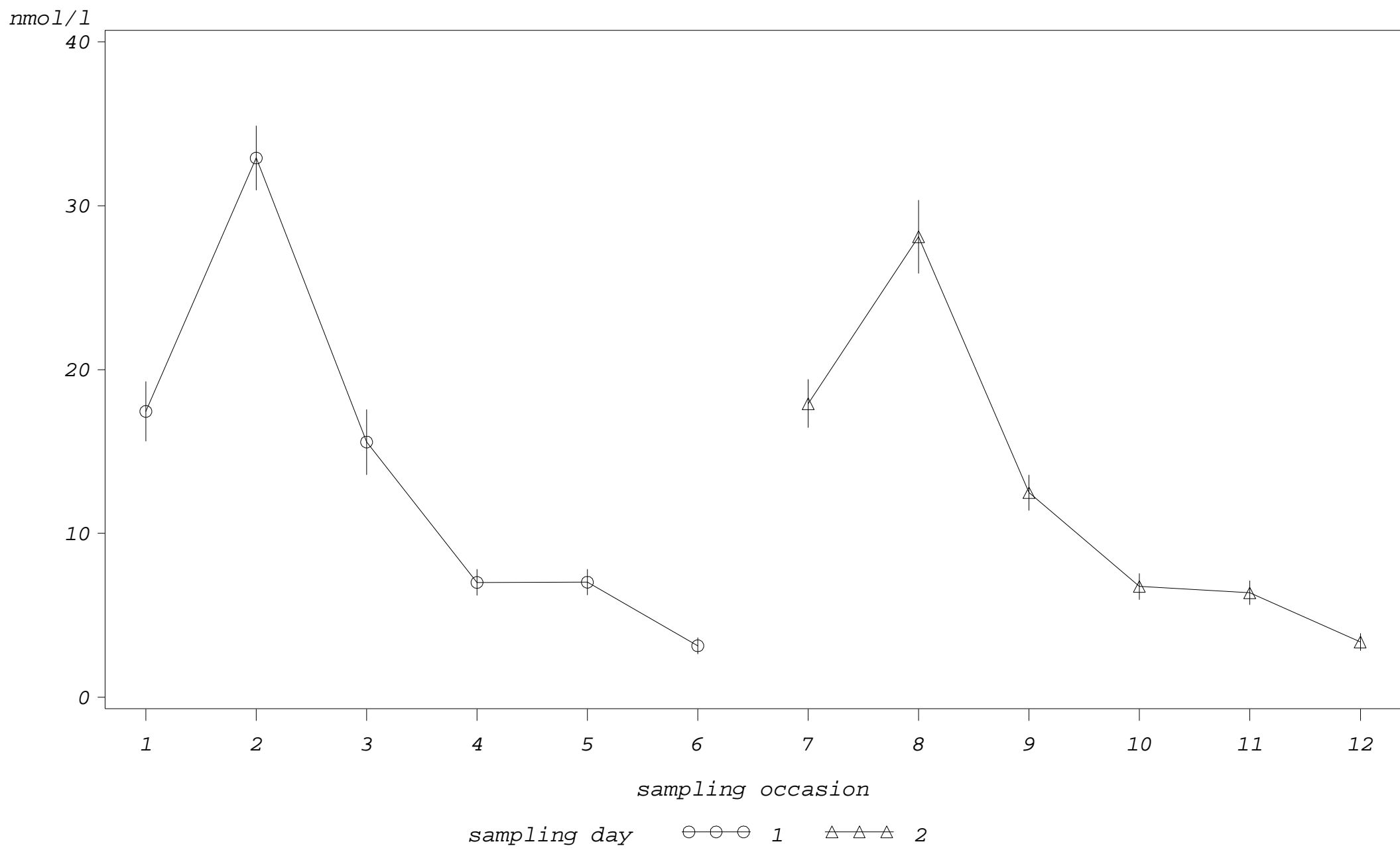
Study 1: diurnal cortisol profiles (teachers)



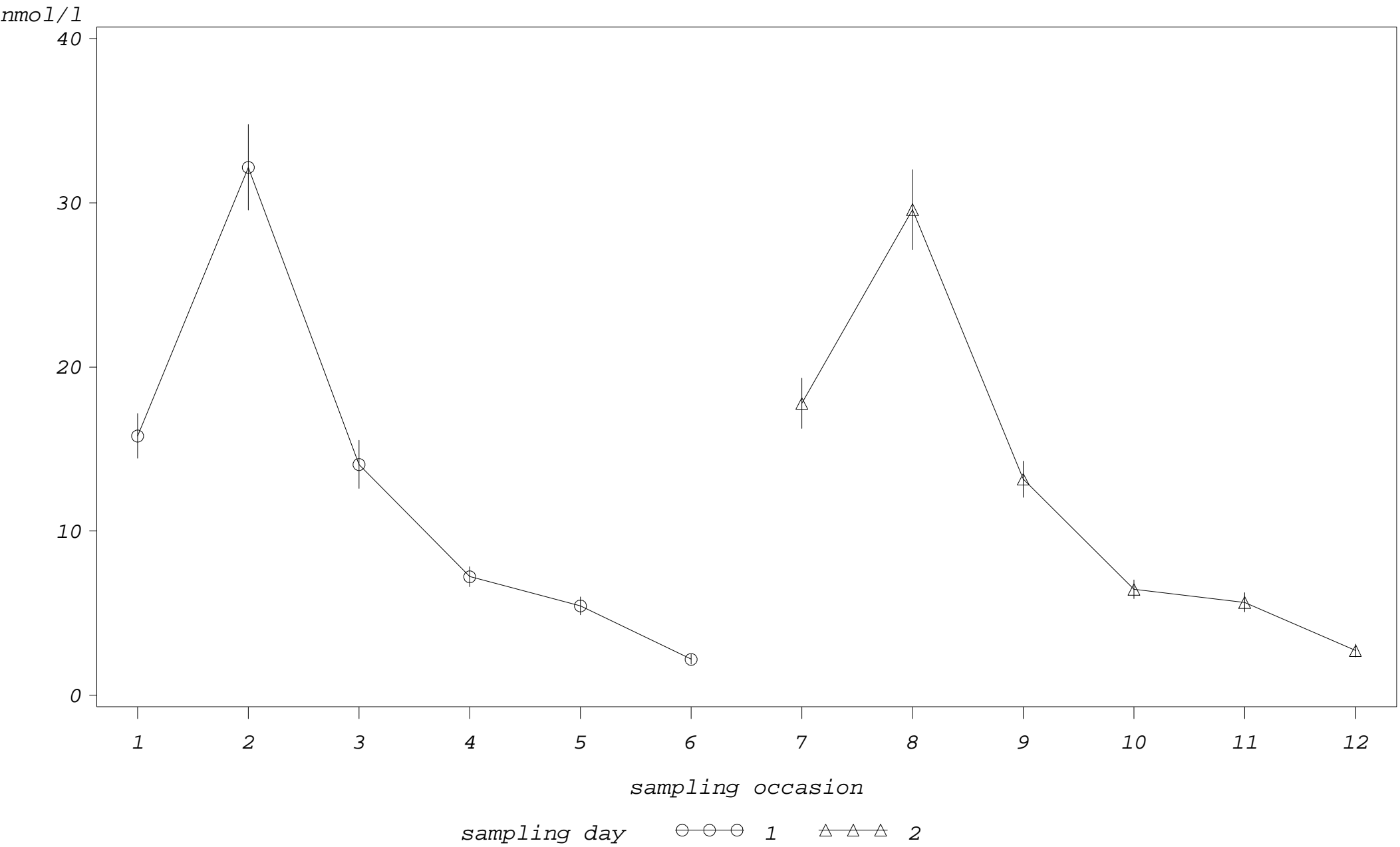
Study 1: diurnal cortisol profiles (hotel staff)



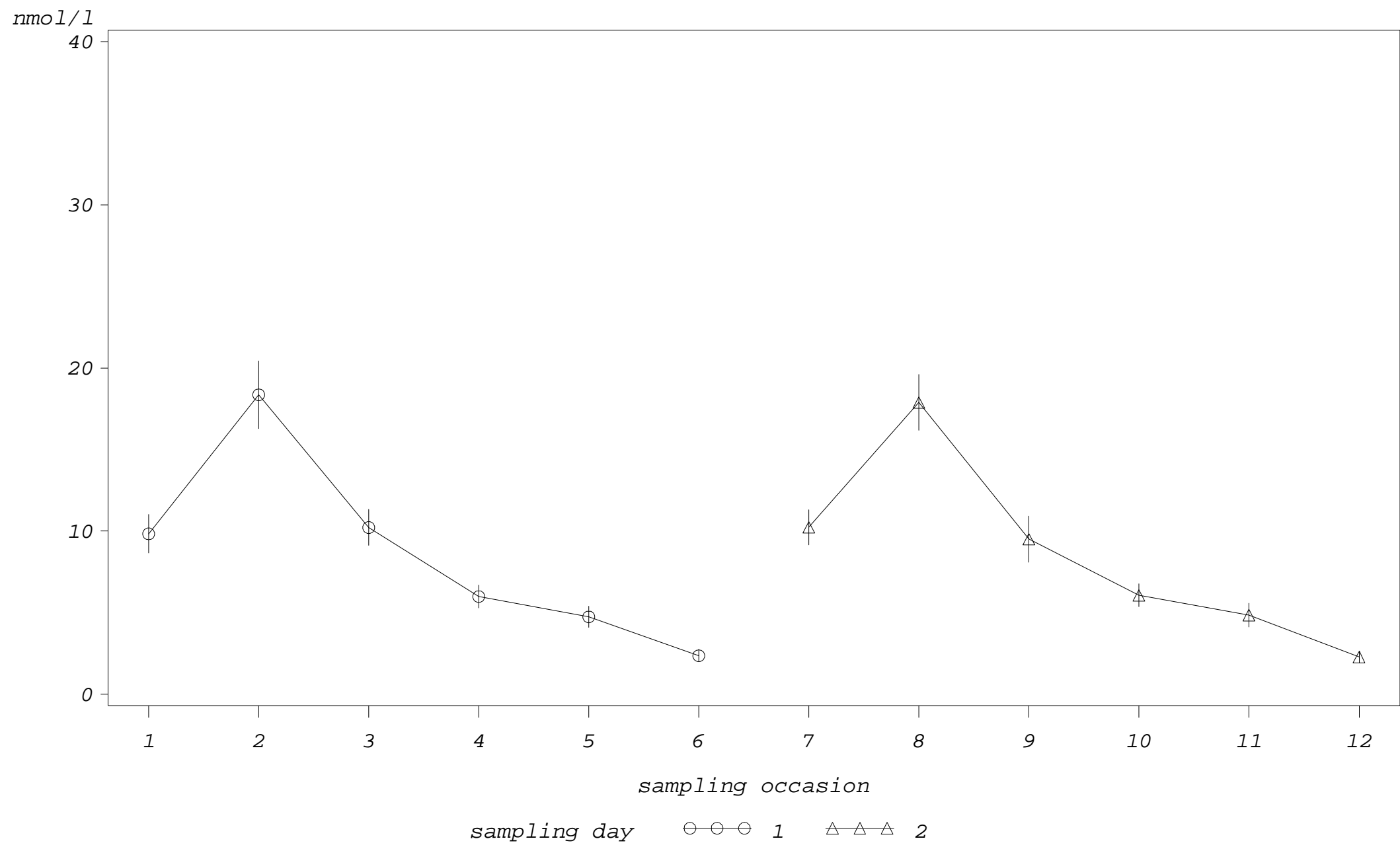
Study 1: diurnal cortisol profiles (social service assistants)



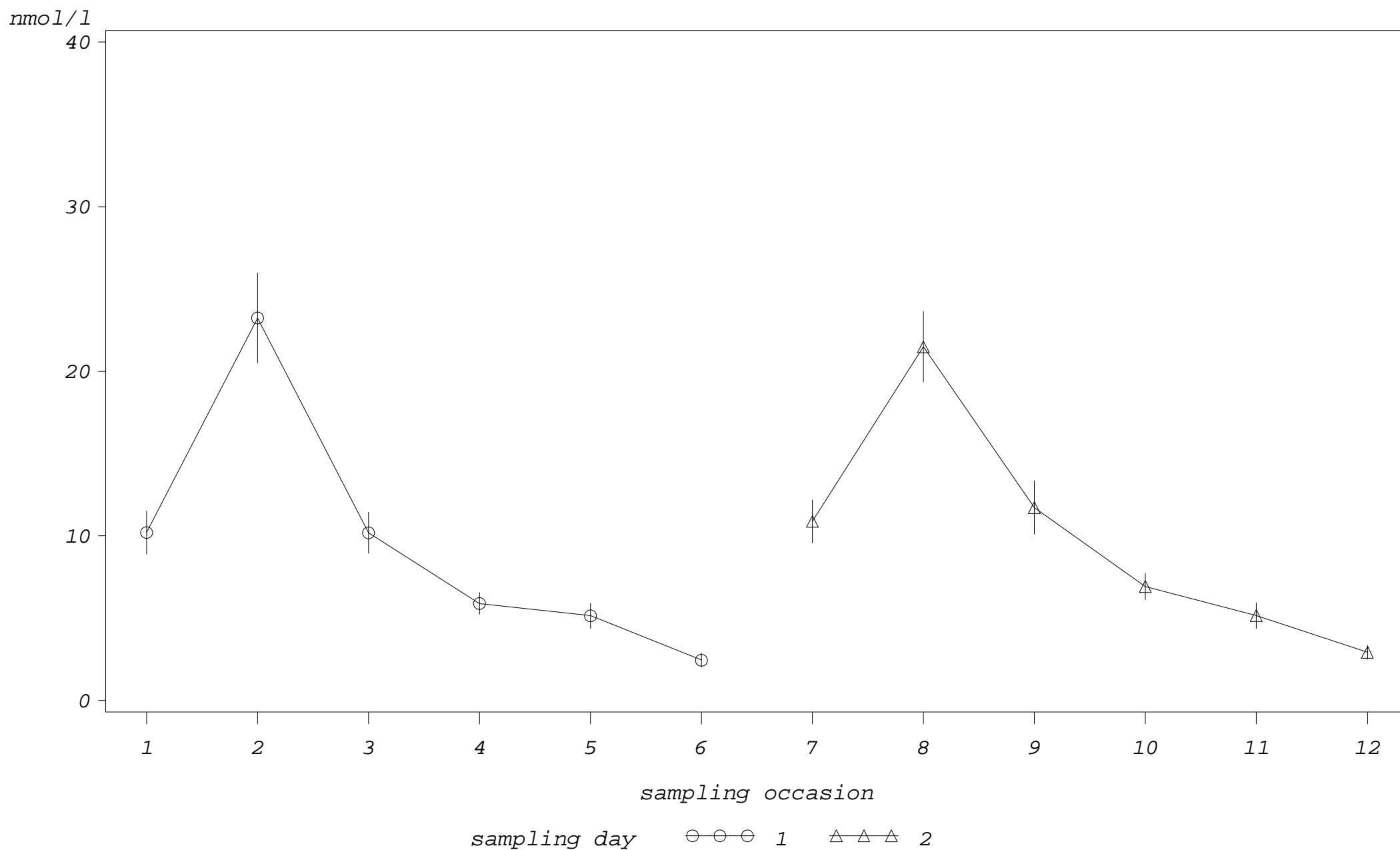
Study 1: diurnal cortisol profiles (participants with shift work)



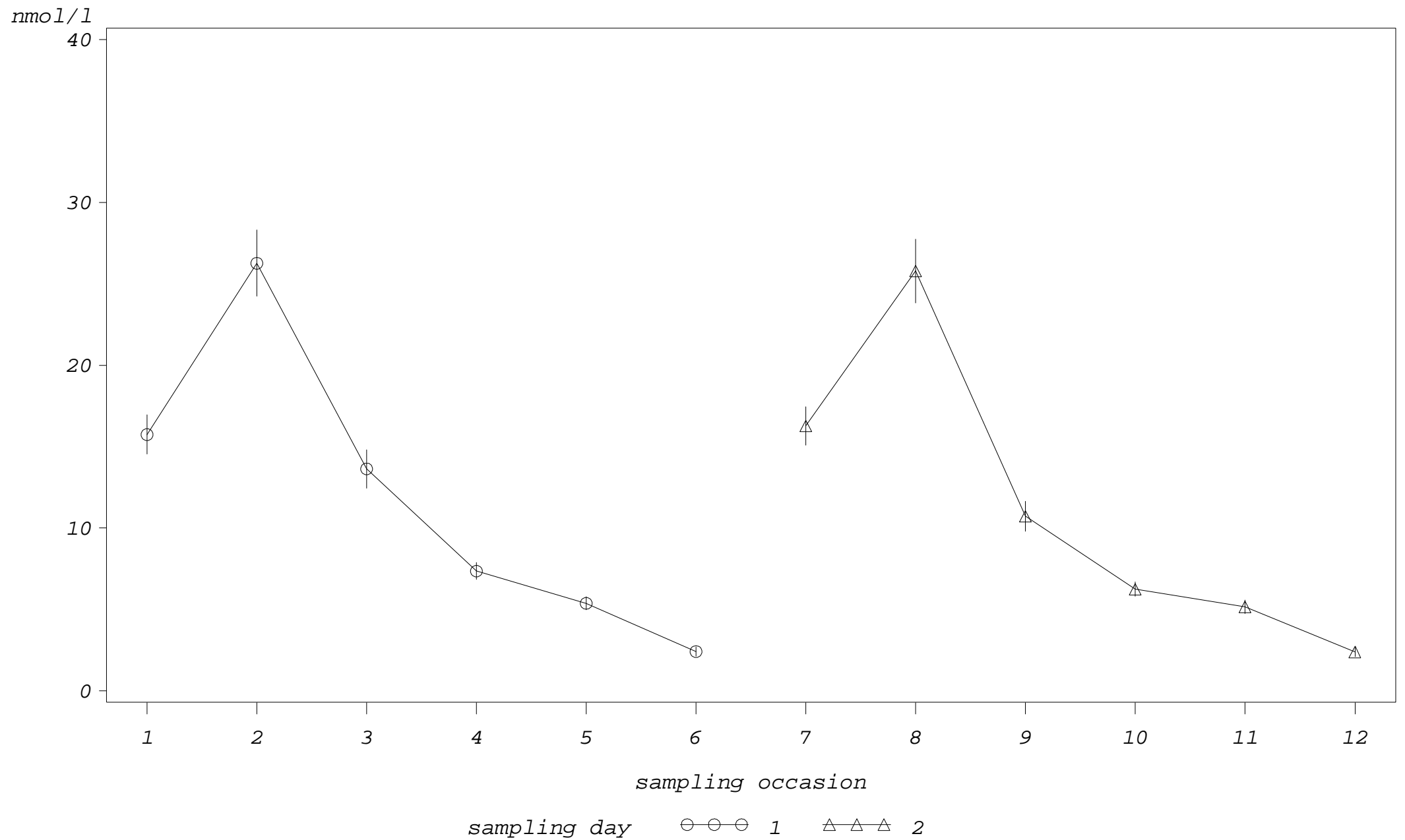
Study 1: diurnal cortisol profiles (participants without shift work)



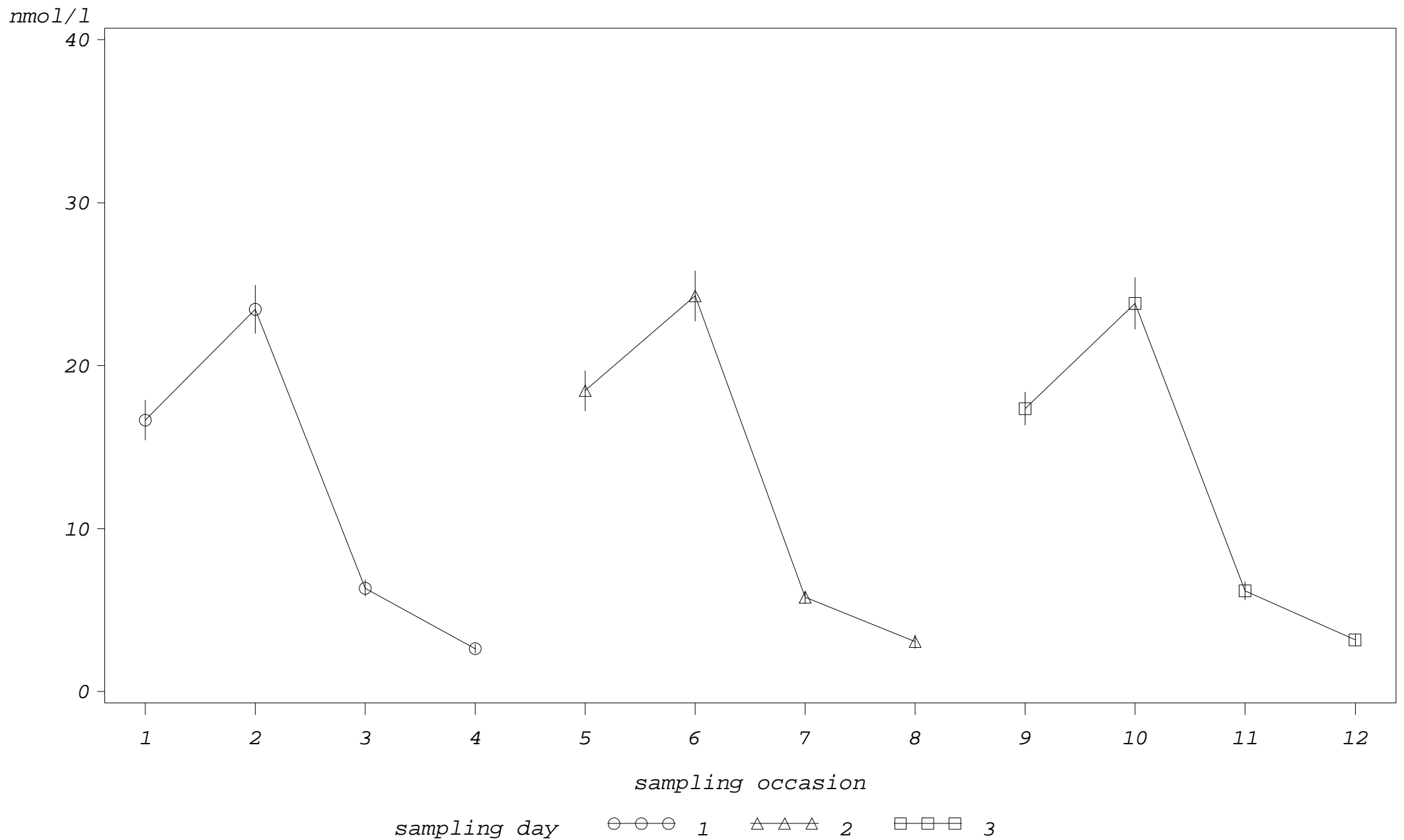
Study 1: diurnal cortisol profiles (current smoker)



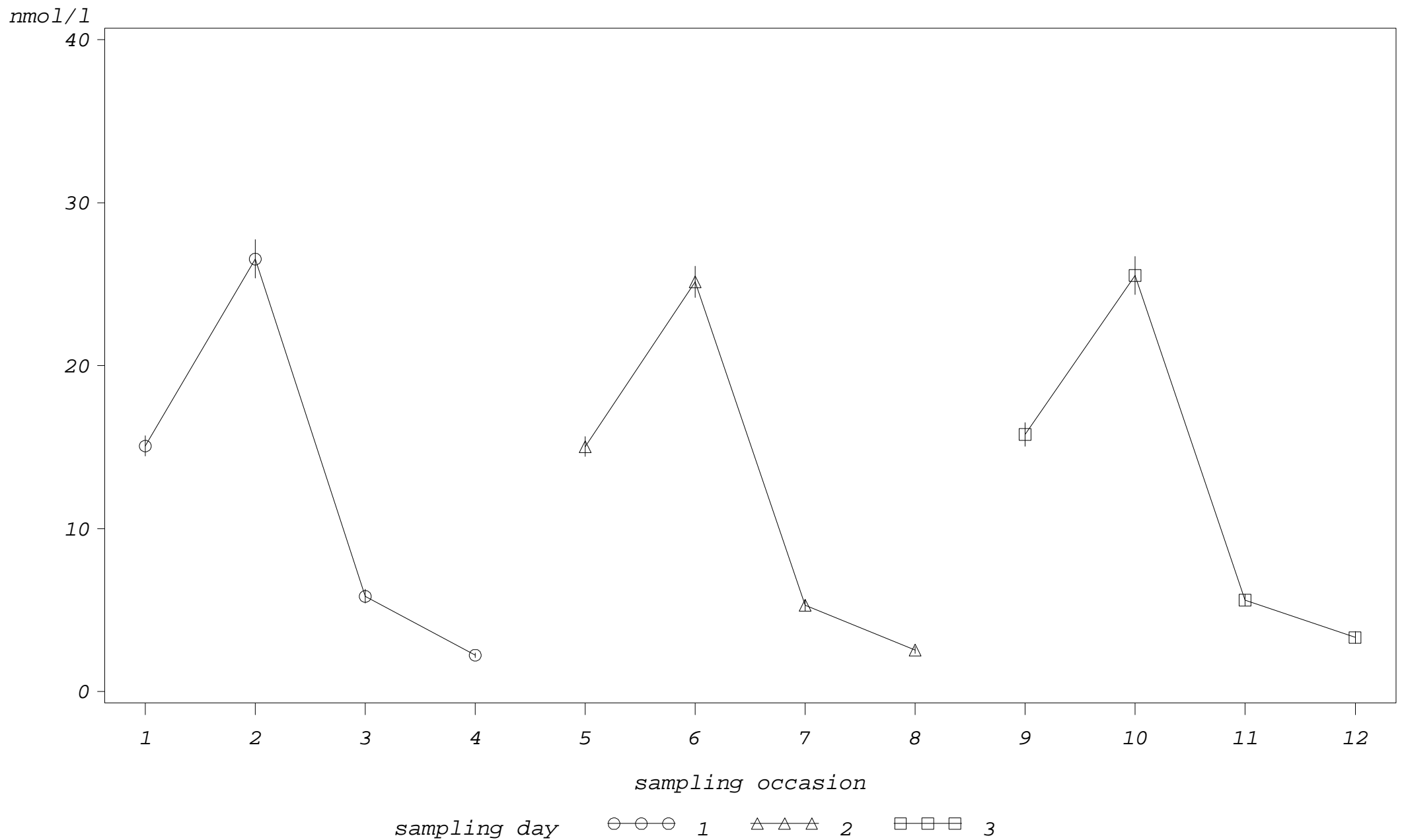
Study 1: diurnal cortisol profiles (non-smoker)



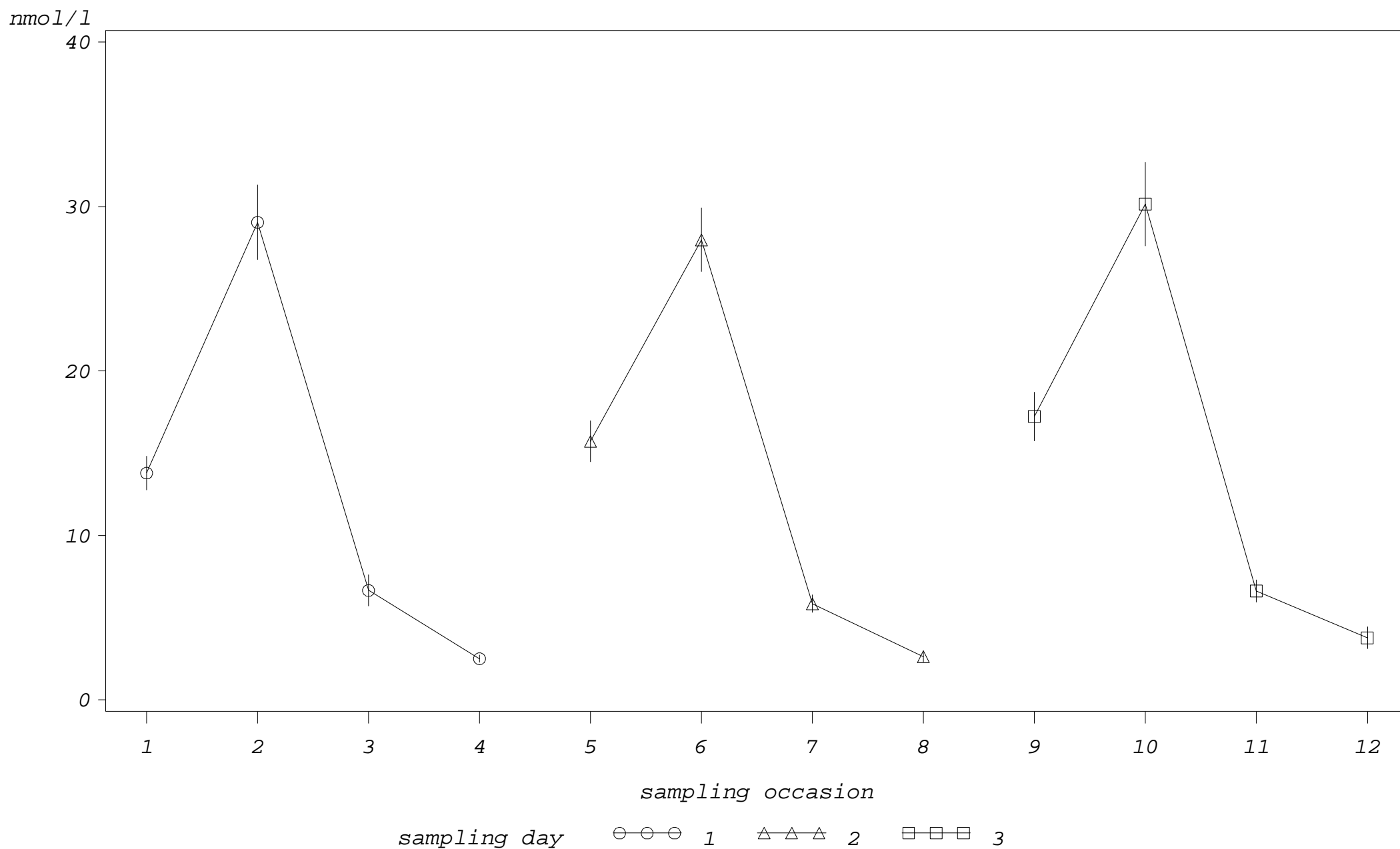
Study 2: diurnal cortisol profiles (men)



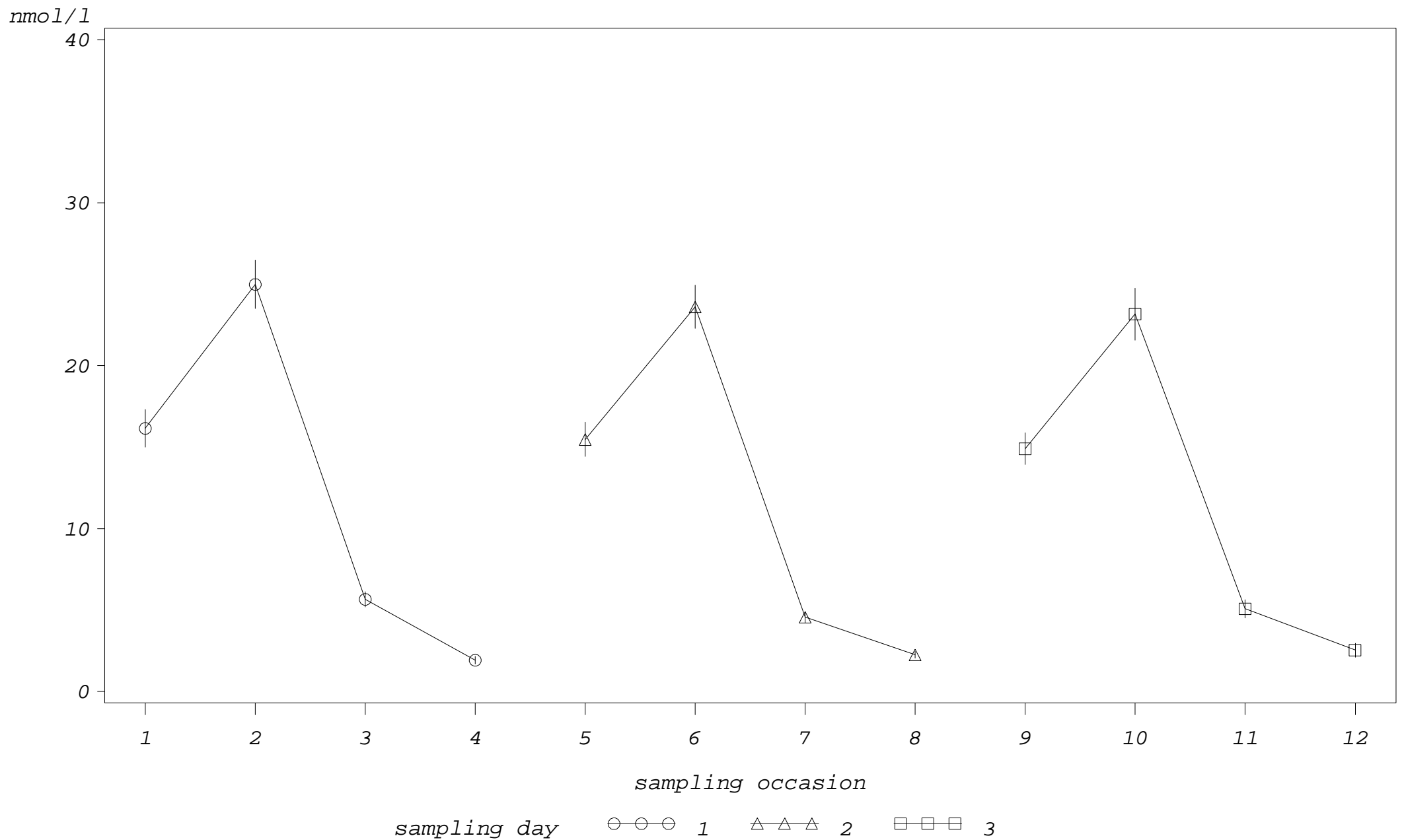
Study 2: diurnal cortisol profiles (women)



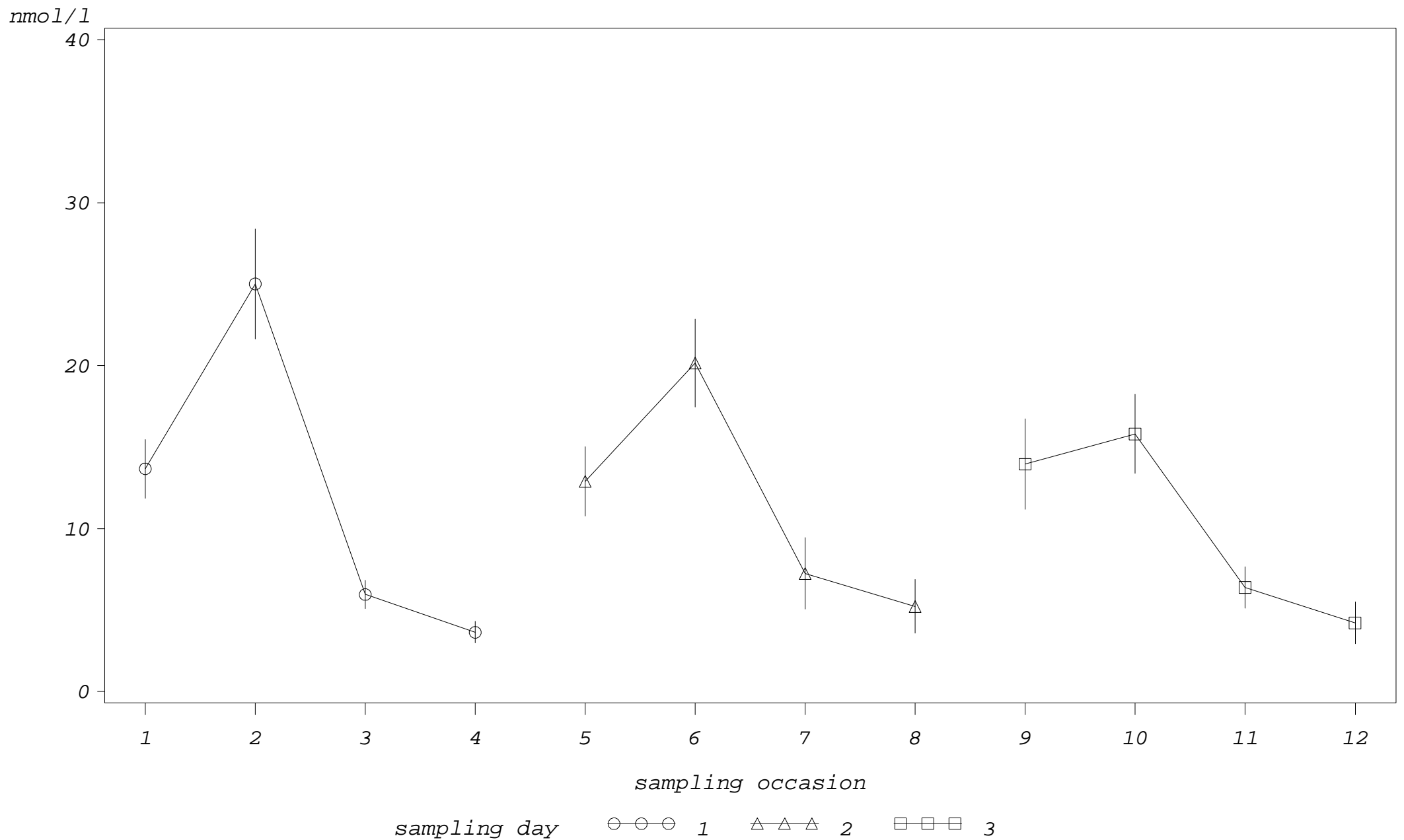
Study 2: diurnal cortisol profiles (nurses)



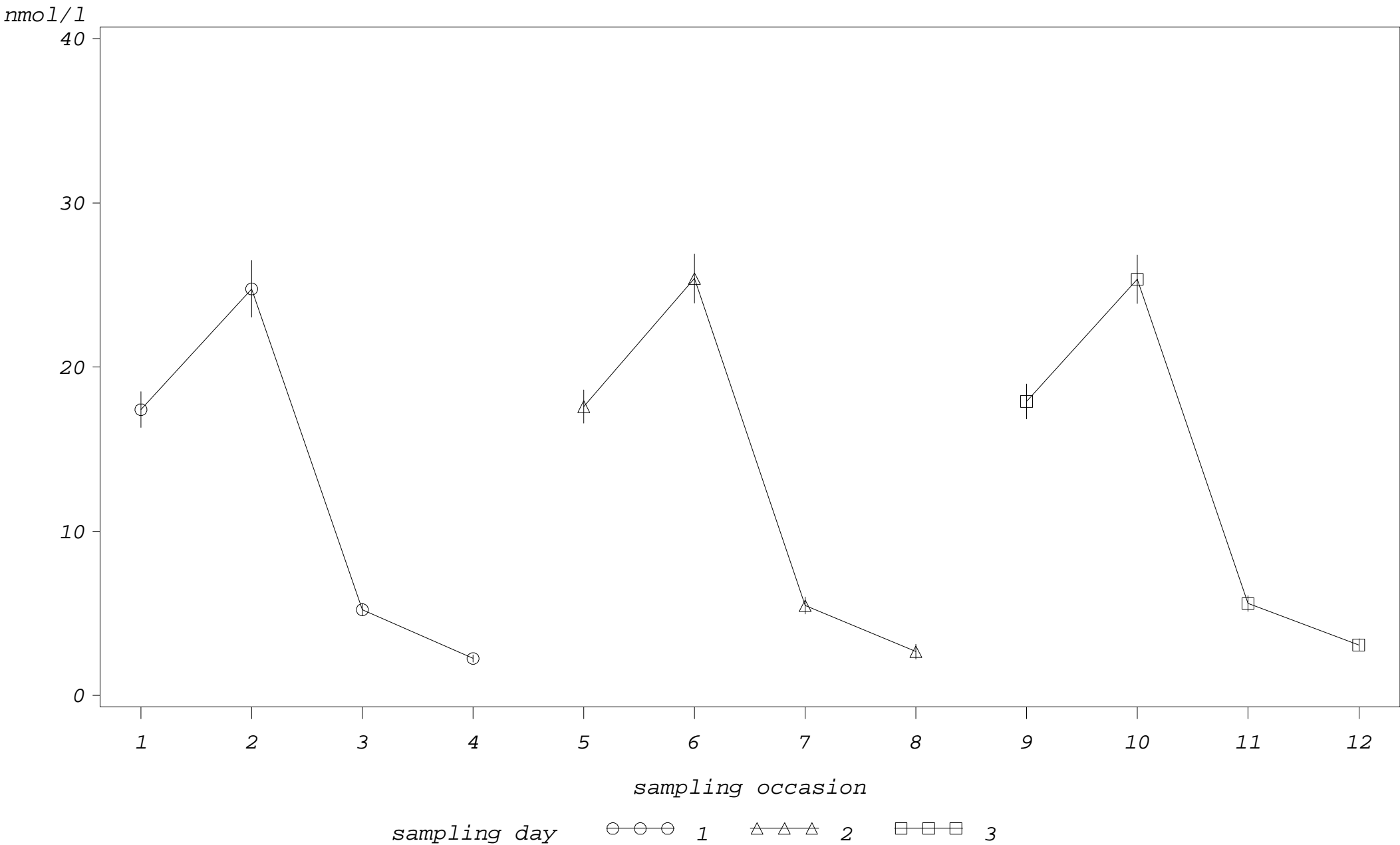
Study 2: diurnal cortisol profiles (teachers)



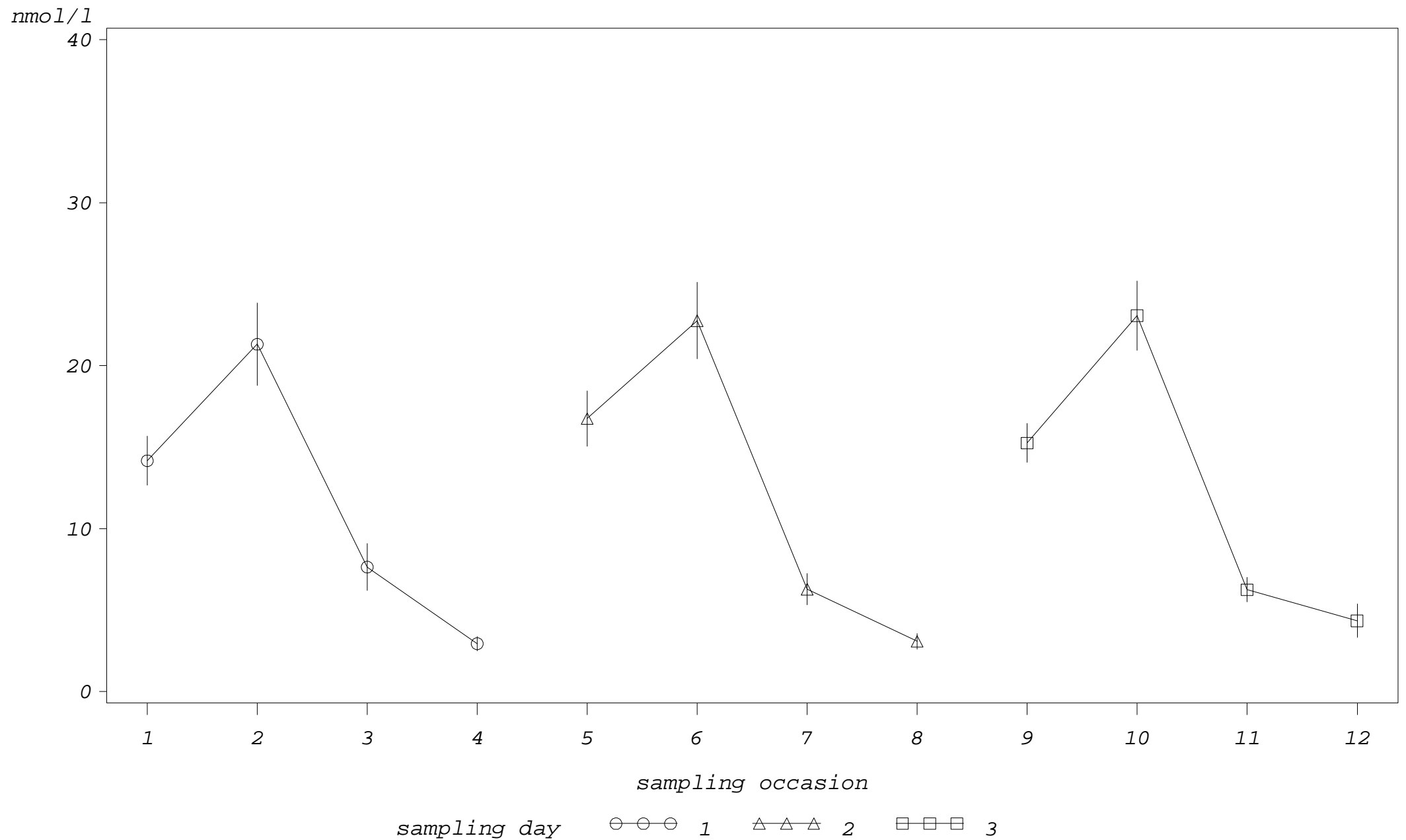
Study 2: diurnal cortisol profiles (hotel staff)



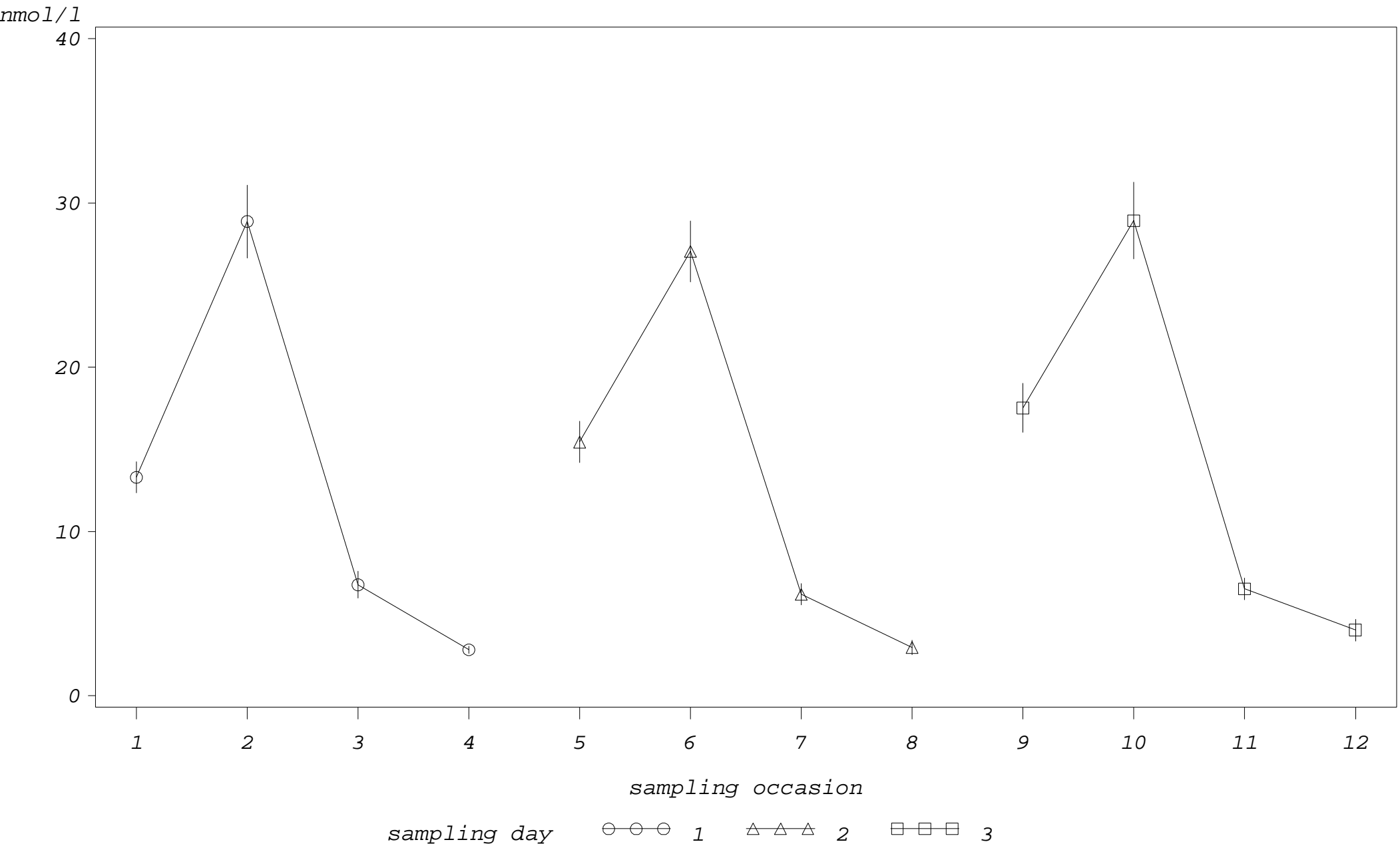
Study 2: diurnal cortisol profiles (social service assistants)



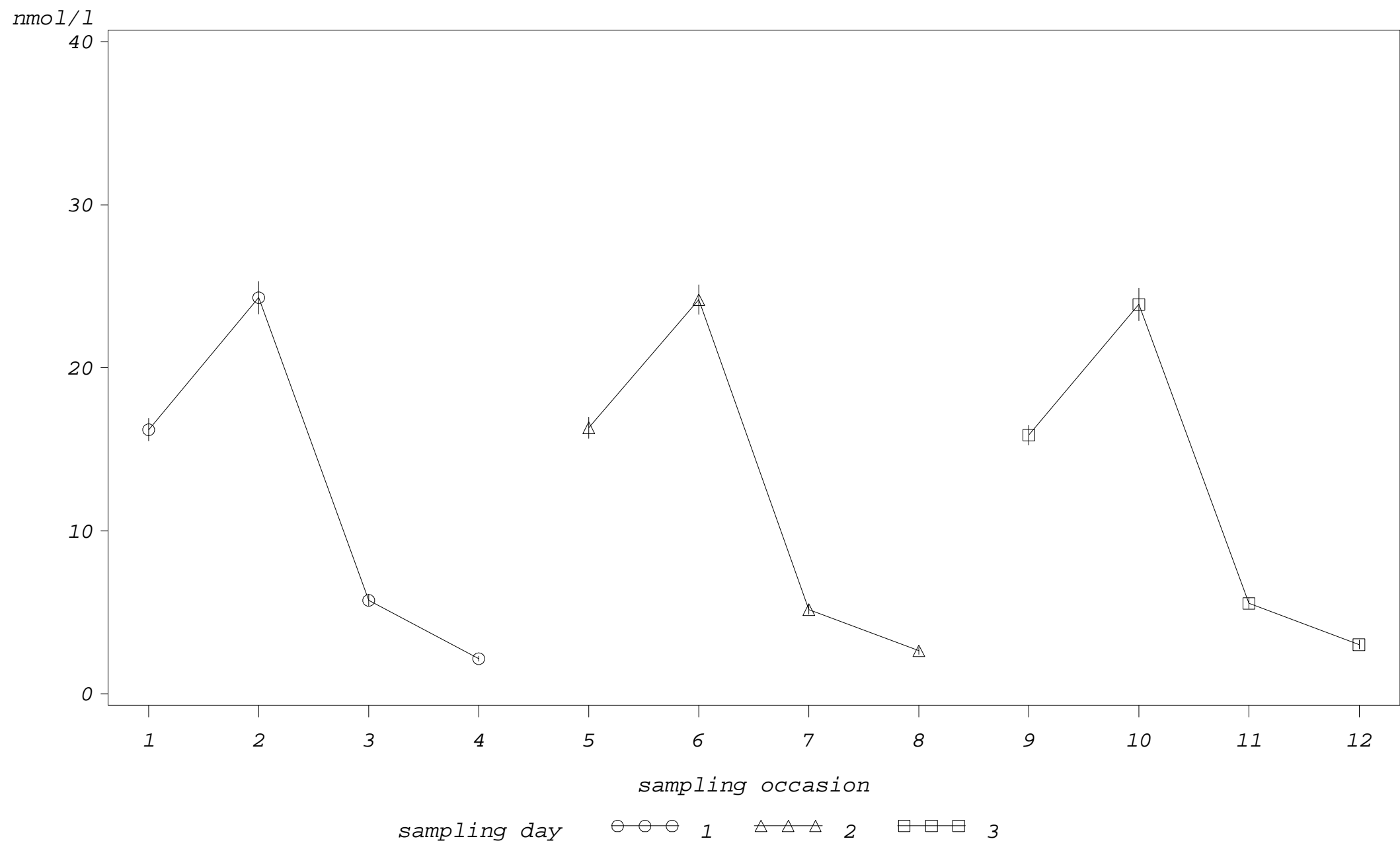
Study 2: diurnal cortisol profiles (mixed occupational group)



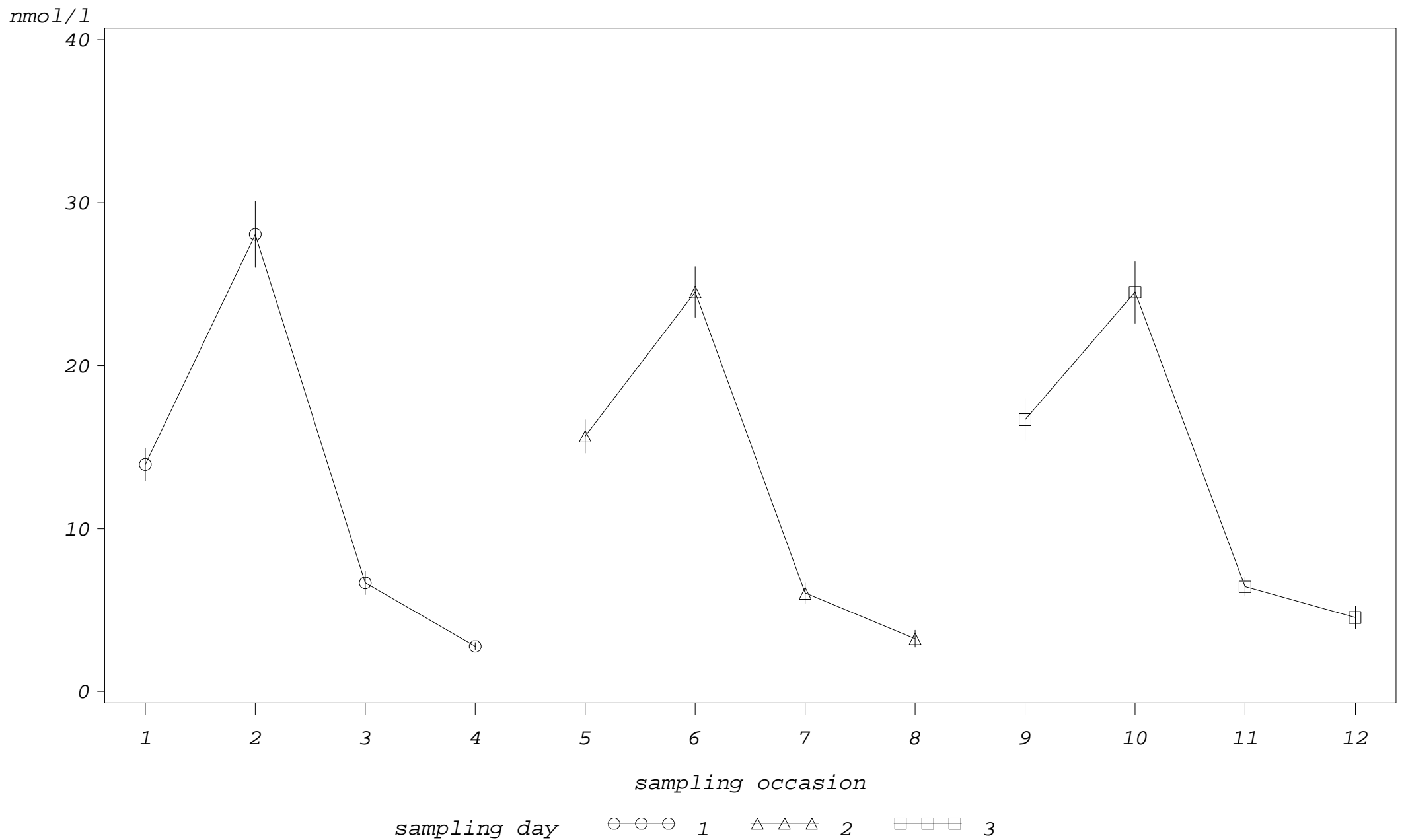
Study 2: diurnal cortisol profiles (participants with shift work)



Study 2: diurnal cortisol profiles (participants without shift work)



Study 2: diurnal cortisol profiles (current smoker)



Study 2: diurnal cortisol profiles (non-smoker)

